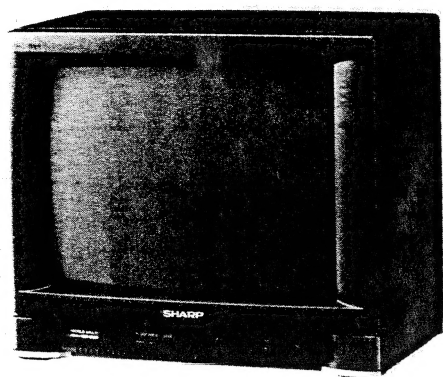


SHARP**SERVICE MANUAL**

S33S414BN1///



**MULTI 21 SYSTEM
COLOUR TELEVISION**
Chassis No. 14BM

**14BN1
14BN14
14BN1A**
MODELS

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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WARNING

The chassis in this receiver is partially hot. Use an isolation transformer between the line cord plug and power receptacle, when servicing this chassis.

To prevent electric shock, do not remove cover. No user — serviceable parts inside. Refer servicing to qualified service personnel.

SHARP CORPORATION

ELECTRICAL SPECIFICATIONS

Power Input	110 V~240 V AC, 50/60 Hz
Power Consumption	62 W
Convergence	Self Converging System
Focus	Bi-Potential, Uni-Potential Electrostatic
Sweep Deflection	Magnetic
Intermediate Frequencies	
Picture IF Carrier	38.9 MHz
Sound IF Carrier	
6.5MHz	32.4 MHz
6.0MHz	32.9 MHz
5.5MHz	33.4 MHz
4.5MHz	34.4 MHz
Colour Sub-Carrier	
PAL/NTSC	34.47 MHz
SECAM	34.494/34.65 MHz
NTSC	35.32 MHz
Audio Power Output Rating	1.5 W (Max.)
Speaker	
Size	8 cm Round x 1 pc.
Voice Coil Impedance	32 Ω at 400 Hz
Aerial Input Impedance	75 Ω Unbalanced
Receiving Channels	
• PAL-B/G, SECAM-B/G	
VHF	E2 thru E12
UHF	21 thru 69
CATV	S1 thru S3, M1 thru M10 S4 thru S20
• PAL-D/K, SECAM-D/K	
VHF	R1 thru R12
UHF	21 thru 69
• PAL-I	
VHF	(IRELAND): B thru J
UHF	(U.K., H.K.): 21 thru 69
• NTSC-M	
VHF	(US): 2 thru 13 (JAPAN): 1 thru 12
UHF	(US): 14 thru 79 (JAPAN): 13 thru 62
CATV	A-8 thru A-1, A thru W
Receiving Frequency	
VHF	48.25 MHz thru 295.25 MHz
UHF	471.25 MHz thru 863.25 MHz

Specifications are subject to change without prior notice.

IMPORTANT SERVICE SAFETY PRECAUTION

- Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and servicing guidelines which follow:

WARNING

- For continued safety, no modification of any circuit should be attempted.
 - Disconnect AC power before servicing.
 - Semiconductor heat sinks are potential shock hazards when the chassis is operating.
 - The chassis in this receiver has two ground systems which are separated by insulation material. The non-isolated (hot) ground system is for the +B voltage regulator circuit and the horizontal output circuit. The isolated ground system is for the low +B DC voltages and the secondary circuit of the high voltage transformer.
- To prevent electrical shock use an isolation transformer between the line cord and power receptacle, when servicing this chassis.

SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove the static charge by connecting a 10k ohm resistor in series with an insulated wire (such as a test probe) between the picture tube ground and the anode lead. (AC line cord should be disconnected from AC outlet.)

- Picture tube in this receiver employs integral implosion protection.
- Replace with tube of the same type number for continued safety.
- Do not lift picture tube by the neck.
- Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage anode completely.

X-RADIATION AND HIGH VOLTAGE LIMITS

- Be sure all service personnel are aware of the procedures and instructions covering X-radiation. The only potential source of X-ray in current solid state TV receivers is the picture tube. However, the picture tube does not emit measurable X-Ray radiation if the high voltage is as specified in the "High Voltage Check" instructions. It is only when high voltage is excessive that X-radiation is capable of penetrating the shell of the picture tube including the lead in glass material. The important precaution is to keep the high voltage below the maximum level specified.
- It is essential that servicemen are available at all times an accurate high voltage meter. The calibration of this meter should be checked periodically.
- High voltage should always be kept at the rated value — no higher. Operation at higher voltages may cause a failure of the picture tube or high voltage circuitry and, also, under certain conditions, may produce radiation in excess of desirable levels.
- When the high voltage regulator is operating properly there is no possibility of an X-radiation problem. Every time a color chassis is serviced, the brightness should be tested while monitoring the high voltage with a meter to be certain that the high voltage does not exceed the specified value and that it is regulating correctly.
- Do not use a picture tube other than that specified or make unrecommended circuit modifications to the high voltage circuitry.
- When trouble shooting and taking test measurements on a receiver with excessive high voltage, avoid being unnecessarily close to the receiver. Do not operate the receiver longer than is necessary to locate the cause of excessive voltage.

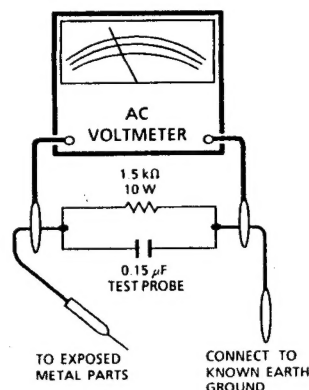
IMPORTANT SERVICE SAFETY PRECAUTION

(Continued)

BEFORE RETURNING THE RECEIVER (Fire & Shock Hazard)

Before returning the receiver to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner:
 - Plug the AC cord directly into a 120 volt AC outlet, (Do not use an isolation transformer for this test).
 - Using to clip leads, connect a 1.5 k Ω , 10 watt resistor paralleled by a 0.15 μ F capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to earth ground.
 - Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor.
 - Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.All check must be repeated with the AC line cord plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these check.) Any current measured must not exceed 0.5 milliamp. Any measurements not within the limits outlined above are indicative of a potential shock hazard and corrective action must be taken before returning the instrument to the customer.



SAFETY NOTICE

Many electrical and mechanical parts in television receivers have special safety-related characteristics.

These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "A" and shaded areas in the *Replacement Parts Lists* and *Schematic Diagrams*. For continued protection, replacement parts must be identical to those used in the original circuit. The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire, X-radiation or other hazards.

SERVICE INSTRUCTIONS

Note: (1) When performing any adjustments to resistor controls and transformers use non-metallic screwdriver or TV alignment tools.
(2) Before performing adjustment, TV set must be on at least 15 minutes.

X-RADIATION PROTECTOR CIRCUIT TEST

After service has been performed on the horizontal deflection system, high voltage system, or +B system, test the X-Radiation protection circuit to ascertain proper operation as follows:

1. Apply 264 V AC using a variac transformer for accurate input voltage.
2. Allow for warm up and adjust all customer controls for normal picture and sound.
3. Turn the user Contrast control and the user Brightness control to the minimum. (The screen becomes dark.)
4. Be sure that the voltage at test point D607 cathode is approx. 17.0 V.
5. Apply the external voltage of 21 V to D607 cathode and be sure that the unit becomes OFF (stand-by) state, that is, the horizontal oscillation of the unit is stopped by the X-RAY protector circuit.
6. Be sure that after disconnecting the external power source.

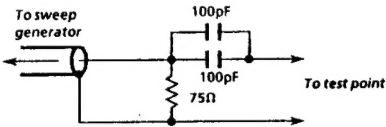
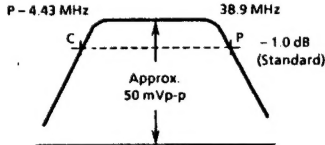
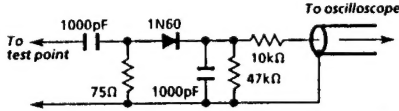
HIGH VOLTAGE CHECK

High voltage is not adjustable but must be checked to verify that the receiver is operating within safe and efficient design limitations as specified checks should be as follows:

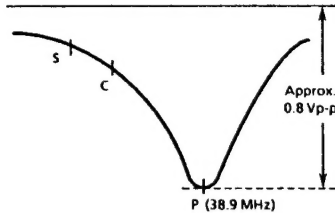
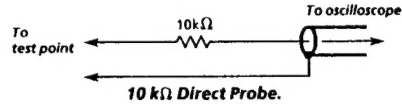
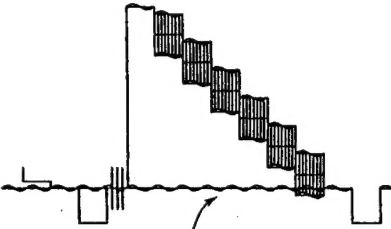
1. Connect an accurate high voltage meter between ground and anode.
2. Operate receiver for at least 15 minutes at 264V AC line voltage, with strong air signal or properly tuned in test signal.
3. Turn the user Contrast control and the user Brightness control to the minimum.
4. Be sure that the high voltage is approx. 25.0 kV.

SERVICE ADJUSTMENT

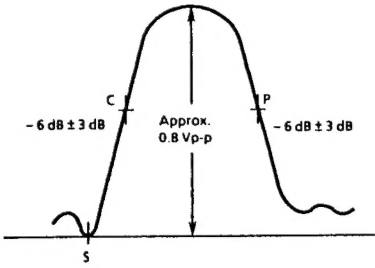
PIF/AFT/AGC ADJUSTMENT

Adjusting Conditions	Adjusting Procedures
1. Tuner IFT Coils The tuner has been factory preset (no adjustment is needed) <ol style="list-style-type: none"> Set reception channel at E10 (When such signal is not available, set V_T voltage at 10V in V_H band.) Connect sweep generator's output to the test point of tuner, by using a 75Ω DC cut probe. 	<ol style="list-style-type: none"> Adjust the tuner IF coils to obtain the waveform as shown figure below.
 <p>Connection Diagram of 75Ω DC Cut Probe.</p> <p>Note: The sweep generator's probe should be grounded closely to the tuner test point.</p>	 <p>Adjust so that "P" and "C" are at the same level.</p>
<ol style="list-style-type: none"> Output level of sweep generator: 85 dB Connect response lead (low impedance probe with detector) to TP201 (collector of Q201). 	
 <p>Connection Diagram of Low Impedance Probe (with Detector).</p>	
<ol style="list-style-type: none"> PIF AGC: Apply DC 4.0V to TP202 (pin (48) of IC801). RF AGC: Apply DC 4V to the tuner AGC terminal. 	

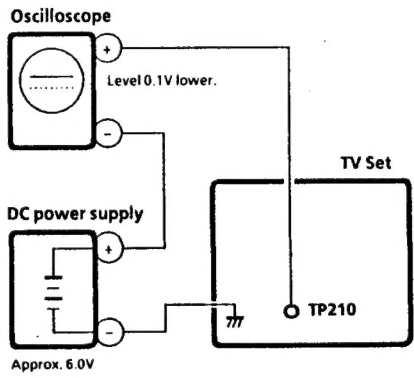
PIF/AFT/AGC ADJUSTMENT (Continued)

Adjusting Conditions	Adjusting Procedures
2. P-Detector Adjustment Adjusting Point <input type="checkbox"/> T205: P-Detector coil <ol style="list-style-type: none"> Connect sweep generator's output to TP203 (pin (46) of IC801). <ul style="list-style-type: none"> Probe in use: 75Ω DC cut probe Sweep output level: 90 dB PIF AGC: Apply 4.0V DC to TP202 (pin (48) of IC801). Have AFT muted (by pressing the preset key to bring in the SEARCH mode). Connect response lead to TP204. The response lead in use should be a direct probe with a resistor of 10 kΩ included. 	<ol style="list-style-type: none"> Adjust T205 so that 38.9 MHz signal is at maximum (± 50 kHz).  <p>* Adjust PIF AGC voltage so that the output waveform is of approx. 0.8 Vp-p.</p>
 <p>10 kΩ Direct Probe.</p>	
3. AFT Adjustment Adjusting Point <input type="checkbox"/> T205: AFT coil <ol style="list-style-type: none"> Receive "PAL COLOUR BAR (channel-E12)" signal. If channel-E12 signal is not available, it is enough to receive the signal of more than channel-E5 or UHF signal. <ul style="list-style-type: none"> Signal strength: Over 55dB, Below 80dB Connect the DC power supply to the tuner's V_T (approx. 11V to be applied) to receive channel-E12. Connect oscilloscope to TP401. <ul style="list-style-type: none"> Oscilloscope range: 0.5 V/div. Sweep time: 20 μsec/div. Synchronization: Horizontal sync. Connect the output of SSG (Standard Signal Generator) to the tuner IF output terminal across a capacitor of 1pF. <ul style="list-style-type: none"> SSG output: 38.9 MHz ± 5 kHz (non modulated) SSG output level: approx. 85 dB 	<p>Fine Adjustment</p> <ol style="list-style-type: none"> Press the preset key to adjust the voltage of the DC power supply until there is no beating in the oscilloscope's waveform. Set the preset button at NORMAL position. Adjust T205 so that no beating is caused at the output waveform.  <p>Finely adjust to make zero the beating</p> <p>* When the preset button is at PST position, AFT is turned off. * When the preset button is set at NOR position, AFT is turned on.</p>

PIF/AFT/AGC ADJUSTMENT (Continued)

Adjusting Conditions	Adjusting Procedures
4. PIF Overall Adjustment	
<ol style="list-style-type: none"> Receive channel-E10 signal. If channel-E10 signal is not available, set V_T voltage at 10V in V_H band. Connect sweep generator's output to the test point of tuner. <ul style="list-style-type: none"> Probe in use: 75Ω DC cut probe Sweep output level: 90 dB Connect response lead to TP204. The response lead in use should be a direct probe with a resistor of 10 kohms included. RF-AGC: Apply approx. 4.0V DC to the tuner AGC terminal. PIF AGC: Apply approx. 4.0V DC to TP202. Connect a 120 ohm damping resistor in parallel to R215, short C243 and C244. Turn off AFT. 	<ol style="list-style-type: none"> Adjust IF AGC voltage so that the output waveform is of approx. 0.8Vp-p. Check that the overall waveform is as shown in Figure below. 

5. RF-AGC Cut-In Adjustment

<p>Adjusting Point <input type="checkbox"/> R248: RF-AGC control</p> <ol style="list-style-type: none"> Keep the AGC Cut-in control near the center position. Receive "COLOUR BAR (channel-E12)" signal. <ul style="list-style-type: none"> Signal strength: 54 dB \pm 1 dB (with 50Ω open) Connect the oscilloscope to the tuner's AGC terminal (TP210). <ul style="list-style-type: none"> Range: DC range Voltage: 10mV/div. Sweep: 10msec./div. <p>* Set the DC power supply to about 6.0V and turn up the oscilloscope range to 10mV (DC).</p>	<ol style="list-style-type: none"> Turn R248 to obtain the highest voltage. Turn R248 slowly in the opposite direction until the voltage drops 0.1V lower than the highest level. Change the antenna input signal to 65dB \pm 2dB and make sure there is no noise. Turn up the input signal to 90 — 95dB to be sure that there is no cross-modulation beat. 
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115V LINE ADJUSTMENT

Adjusting Conditions	Adjusting Procedures
<p>Adjusting Point <input type="checkbox"/> R711: 115V Adjustment Control</p> <ol style="list-style-type: none"> Set the R711 to 5/10 before supplying power. Receive "MONOSCOPE PATTERN" signal. Set Contrast and Brightness controls at MAX position. Connect DC milliammeter to TP602 and TP603. Using the DC milliammeter, check to see that the beam current is between 700 and 800 μA. Note: In other cases than the above, adjust the sub-contrast control (R420) Connect Digital voltmeter to TP701. 	<ol style="list-style-type: none"> Adjust the R711 until the TP701's voltage becomes 115V \pm 0.5V.

VIDEO CHROMA ADJUSTMENT

Adjusting Conditions	Adjusting Procedures
1. CRT Cut-off Adjustment	
Adjusting Point <input type="checkbox"/> R853: Red Bias control <input type="checkbox"/> R859: Green Bias control <input type="checkbox"/> R865: Blue Bias control <input type="checkbox"/> T602: Screen control (a part of T602) <input type="checkbox"/> R857: Green Drive control <input type="checkbox"/> R863: Blue Drive control <i>Note: Prior to this adjustment, warm up the unit with the beam current of more than 450 μA for more than 30 minutes.</i>	<ol style="list-style-type: none"> Slowly turn the Screen control clockwise until the horizontal raster appears slightly, and stop it. Here, one of the three colours (red, blue, green) appears first as the Screen control is turned. So, touching off the Bias control belonging to the first colour, use and move the other two controls so that the horizontal raster becomes white. Turn the Screen control counterclockwise until the horizontal raster disappears, and stop it.
<ol style="list-style-type: none"> Receive "MONOSCOPE PATTERN" signal. Push the "P-N" key on the remote controller to make the picture normal. Set Red bias control at MIN position. Set Green bias control at MIN position. Set Blue bias control at MIN position. Set Green drive control at CENTER position. Set Blue drive control at CENTER position. Set the Screen control at MIN position. Set to the AV mode. Make sure the sign disappears and make TP401 and TP402 short-circuited. 	

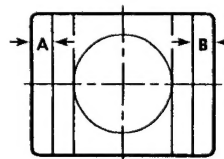
2. White Balance and Back Ground Adjustment

Adjusting Point <input type="checkbox"/> R857: Green Drive control <input type="checkbox"/> R863: Blue Drive control <input type="checkbox"/> R420: Sub-Contrast control <i>Note: Prior to this adjustment, warm up the unit with the beam current of more than 450 μA for more than 30 minutes.</i>	<ol style="list-style-type: none"> Adjust Sub-Contrast control so that the beam current becomes 0.8 mA (rough adjustment) Adjust Green Drive control and Blue Drive control so that the colour temperature is at 9300°K. (High beam: 0.8 mA). Adjust the Contrast control and Brightness control so that the beam current is approx. 200 μA, and check that the colour temperature is at 9300°K. If the temperature is not at 9300°K, go back to "CRT CUT-OFF ADJUSTMENT" and repeat the adjustment.
<ol style="list-style-type: none"> Receive "MONOSCOPE PATTERN" signal. Set the Contrast and Brightness controls at MAX position. Connect beam ammeter to TP601 and TP602. (Full scale: 1 mA) 	

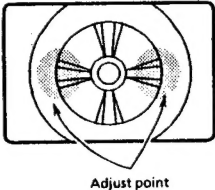
VIDEO CHROMA ADJUSTMENT (Continued)

Adjusting Conditions	Adjusting Procedures
3. Sub-Contrast Adjustment	
Adjusting Point <input type="checkbox"/> R420: Sub-Contrast control <i>Note: Prior to this adjustment, warm up the unit with the beam current of more than 450 μA for more than 30 minutes.</i>	<ol style="list-style-type: none"> Adjust Sub-Contrast control so that the beam current becomes 0.8 mA.
<ol style="list-style-type: none"> Receive "MONOSCOPE PATTERN" signal. Set the Contrast and Brightness controls at MAX position. Connect beam ammeter to TP601 and TP602. (Full scale: 1 mA) 	

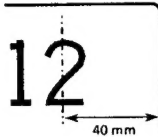
DEFLECTION LOOP ADJUSTMENT

Adjusting Conditions	Adjusting Procedures
1. Horizontal Center Adjustment	
Adjusting Point <input type="checkbox"/> R613: Horizontal Center control <ol style="list-style-type: none"> Receive the "MONOSCOPE PATTERN (Channel-E5)" signal. <i>Note: Make this adjustment after the purity and convergence adjustments.</i>	<ol style="list-style-type: none"> Adjust R613 so that the horizontal center is ensured with A = B. 
2. Vertical Size Adjustment	
Adjusting Point <input type="checkbox"/> R509: Vertical Size control <ol style="list-style-type: none"> Receive the "MONOSCOPE PATTERN (Channel-E5)" signal. Set the Brightness and Contrast controls to MAX position. <i>Note: Keep the vertical size well-balanced with the horizontal one.</i>	<ol style="list-style-type: none"> Adjust R509 so that the vertical size correspond to the overscan of the horizontal one. <p>V-SIZE 8% TYP 10% MAX</p>

■ FOCUS ADJUSTMENT

Adjusting Conditions	Adjusting Procedures
<p>Adjusting Point</p> <p>□ T602: Focus control (a part of T602)</p> <ol style="list-style-type: none"> 1. Receive "MONOSCOPE PATTERN" signal. 2. Set Contrast control at NORMAL position. 3. Set Brightness control at MAX position (with 0.8 mA of beam current). (Instead of monoscope pattern signal, it is allowed to use white pattern signal of 88% modulation.) 	<ol style="list-style-type: none"> 1. Adjust Focus control to have best focus at the central area of CRT. 

■ SIGN POSITION ADJUSTMENT

Adjusting Conditions	Adjusting Procedures
<p>Adjusting Point</p> <p>□ T1001: Sign Position control</p> <ol style="list-style-type: none"> 1. Turn the channel call on (on the remote controller). 	<ol style="list-style-type: none"> 1. Adjust T1001 so that the center of the first-digit figure of the channel number be about 40 mm from the right edge of the CRT. 

■ PURITY ADJUSTMENT

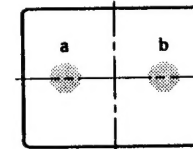


Figure A.

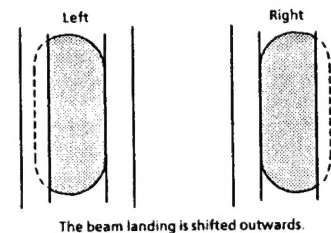


Figure B.

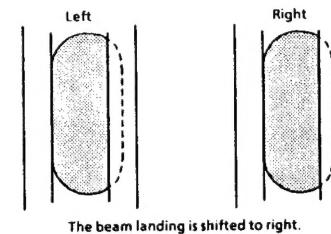


Figure C.

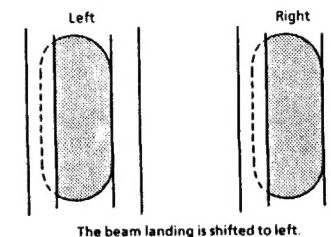


Figure D.

Adjusting Conditions
<ol style="list-style-type: none"> 1. Prior to the purity adjustment, warm up the unit with beam current of more than 450 μA, for more than 30 minutes. 2. Receive the green signal alone and adjust the beam current to approx. 450 μA. 3. Fully degauss the CRT with the degaussing coil. 4. Before the purity adjustment, it is needed to roughly adjust the static convergence. 5. Set the purity magnet at the position which gives zero (0) magnetic field.

Adjusting Procedures
<p>Adjustment:</p> <p>During the adjustment, keep the unit facing the east.</p> <ol style="list-style-type: none"> 1. Observe the green spots ("a" and "b") with a microscope as shown in Fig. A, and adjust the purity magnet so that they are at the specified landing position. 2. If the right and left green spots are both deviated outwards from their landing positions as shown in Fig. B, push the deflection yoke forwards until their positions are corrected. 3. If the beam landing is shifted to right or left as shown in Figs. C and D, adjust the opening degree of the purity magnet so that the beam landing is correctly positioned. 4. Adjust the purity magnet so that the beam landing is correct at either of the central part, right and left parts of screen, then check that the green beams at four corners of screen are all correctly positioned. Finally, check that the beam landing at any part of screen is satisfactory with the Rank "B" specifications. 5. If the green beam is positioned to mix with the other colour, pull the deflection yoke backward. <ul style="list-style-type: none"> ● Outside of the specified landing: To front of the deflection yoke. ● Inside of the specified landing: To back of the deflection yoke. 6. Set the raster rotation at "0" position (with the unit facing the east). 7. Tighten the screws of the deflection coil. Tightening torque: 11 kg \pm 2 kg.

CONVERGENCE ADJUSTMENT

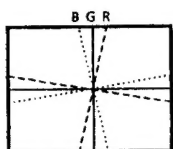
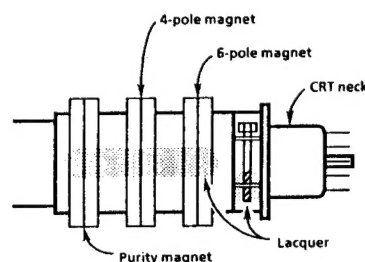
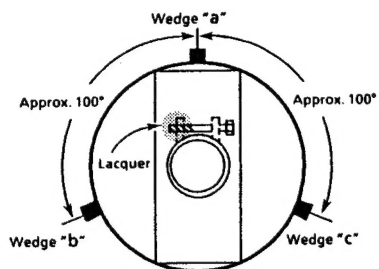


Figure a.

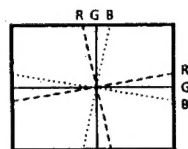


Figure b.

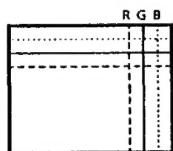


Figure c.

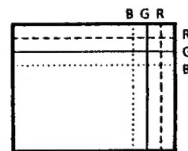


Figure d.

Adjusting Conditions

This adjustment should be performed after the purity magnet adjustment.

1. Receive "CROSSHATCH PATTERN" signal.
2. Set the Brightness control and Contrast control at MAX position.

Adjusting Procedures

STATIC CONVERGENCE

1. Adjust the opening degree of the 4-pole magnet and rotate the magnet to converge red and blue lines.
2. Adjust the opening degree of the 6-pole magnet and rotate the magnet to converge red, blue and green lines.

DYNAMIC CONVERGENCE

3. Dynamic convergence (convergence of the three colour fields) at the edges of CRT screen is accomplished in the following manner.

• Convergence in Fig. a :

Insert wedge "a" between the deflection yoke and CRT, and tilt the deflection yoke upward until the mis-convergence shown in Fig. a is corrected.

• Convergence in Fig. b :

Insert wedges "b" and "c" between the deflection yoke and CRT, and tilt the deflection yoke until the mis-convergence shown in Fig. b is corrected.

• Convergence in Fig. c :

Insert wedge "c" deeply between the deflection yoke and CRT, and tilt the deflection yoke to right until the mis-convergence shown in Fig. c is corrected.

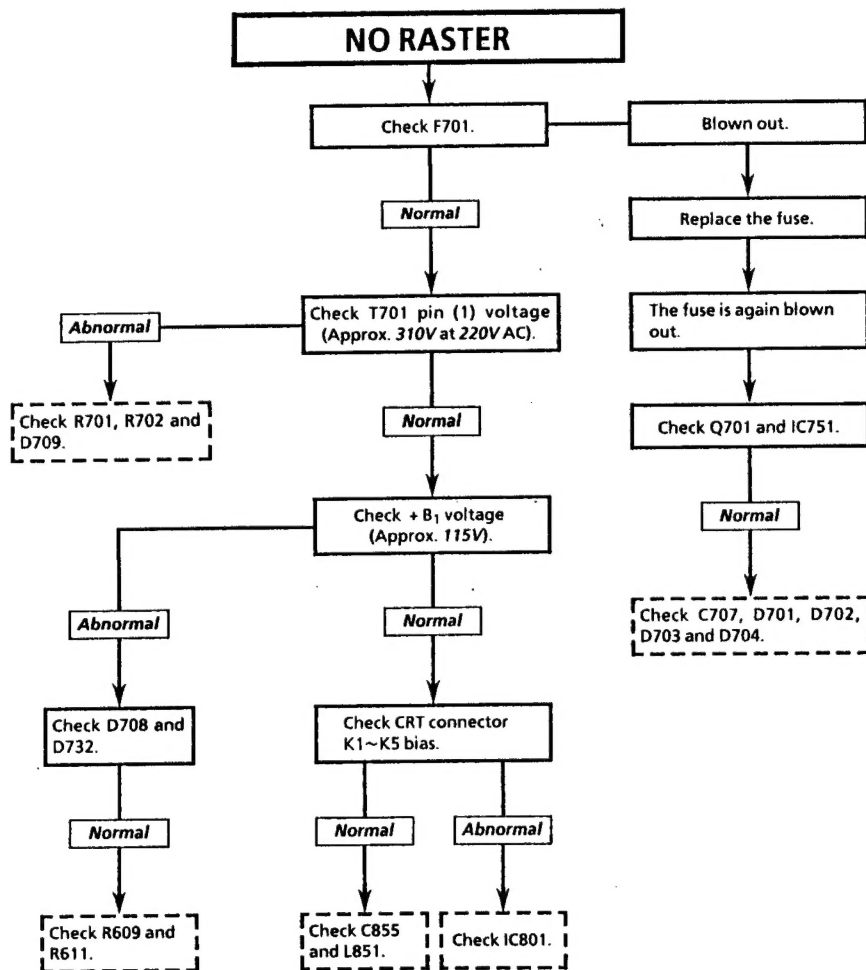
• Convergence in Fig. d :

Insert wedge "b" deeply between the deflection yoke and CRT, and tilt the deflection yoke to left until the mis-convergence shown in Fig. d is corrected.

4. Stick the three wedges onto the CRT, and apply glass tapes thereon.
5. Apply lacquer to the deflection yoke screw, magnet unit (made of purity, 4-pole and 6-pole magnets) and magnet unit screw.

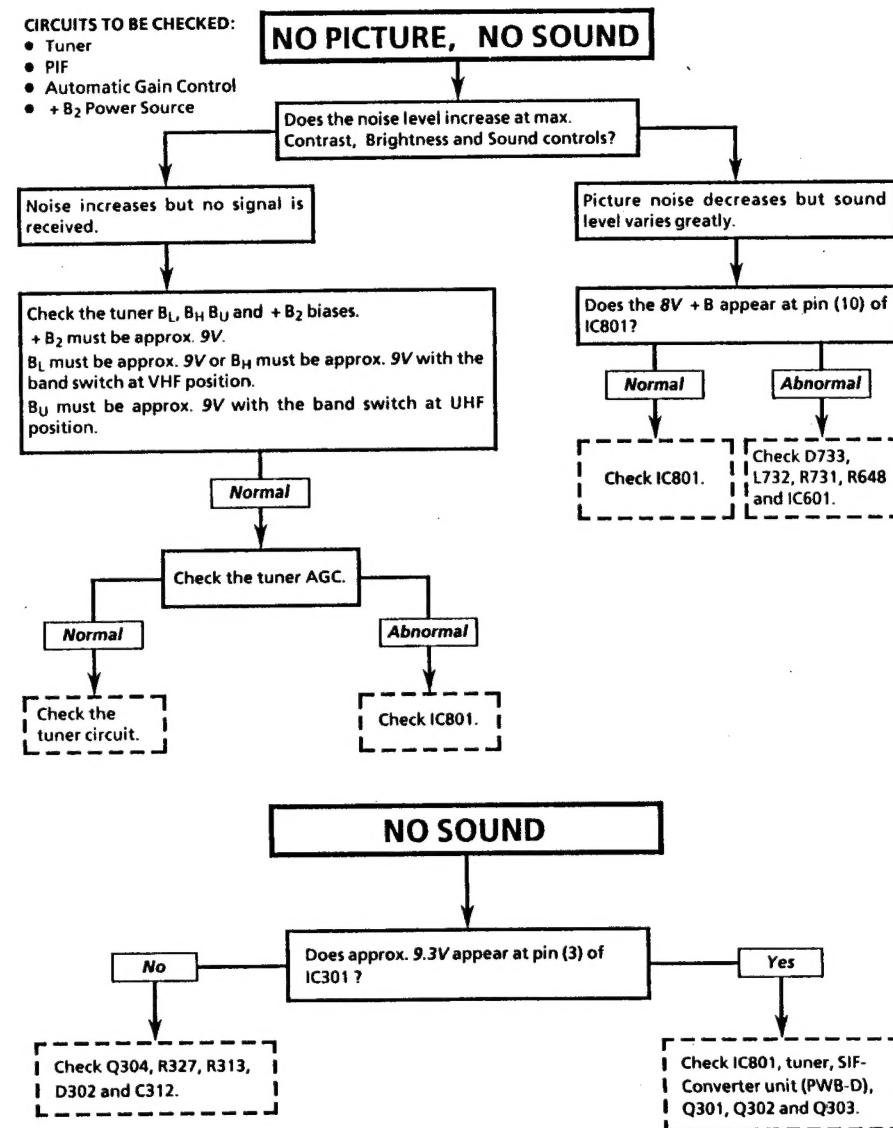
After the adjustment, receive either the Red or the Blue signal and check that there is no mixture with the other colour signal.

TROUBLE SHOOTING TABLE



9-1

- CIRCUITS TO BE CHECKED:**
- Tuner
 - PIF
 - Automatic Gain Control
 - +B₂ Power Source



9-2

NEITHER VERTICAL NOR HORIZONTAL SYNCHRONIZATION

CIRCUIT TO BE CHECKED:
● Sync. Separator Circuit.

Check IC801.

DEFECTIVE VERTICAL AMP. AND VERTICAL LINEARITY

Readjust vertical size.

Vertical size is abnormal.

Check R510, R511, C514, R509 and IC551.

Vertical linearity is abnormal.

Check C508, R519, R508 and R505.

NO VERTICAL SCAN

Check IC501 bias.

Normal

Check C506.

Abnormal

Check IC501.

NO SPECIFIC COLOUR

No

Check IC801, R840, R841, R842, D807, D808, D809, Q801, Q802, Q803 and Q804.

Is some colour produced in B/W broadcast reception?

Yes

Is the white balance properly adjusted?

No

Readjust the white balance.

Yes

The picture colour is cyan.

Check Q851 and its adjacent circuits.

The picture colour is magenta.

Check Q852 and its adjacent circuits.

The picture colour is yellow.

Check Q853 and its adjacent circuits.

NO SPECIFIC COLOUR IS EITHER PAL OR SECAM OR NTSC DEFECTIVE

Overall PAL, SECAM, and NTSC defective.

Check IC801, bias control circuit and IC802.

Both PAL, SECAM defective.

Check SIF Converter Unit (PWB-D), Q207, Q206, X802 and C819

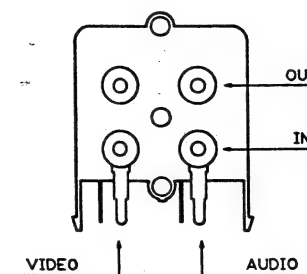
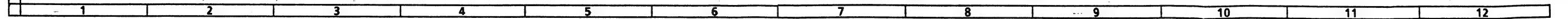
SECAM only defective.

Check IC901 and its peripheral circuits.

NTSC only defective.

Check SIF Converter Unit (PWB-D), Q207, Q206, X803, C820 and pin (27) of IC801 bias control circuit.

A
B
C
D
E
F
G
H

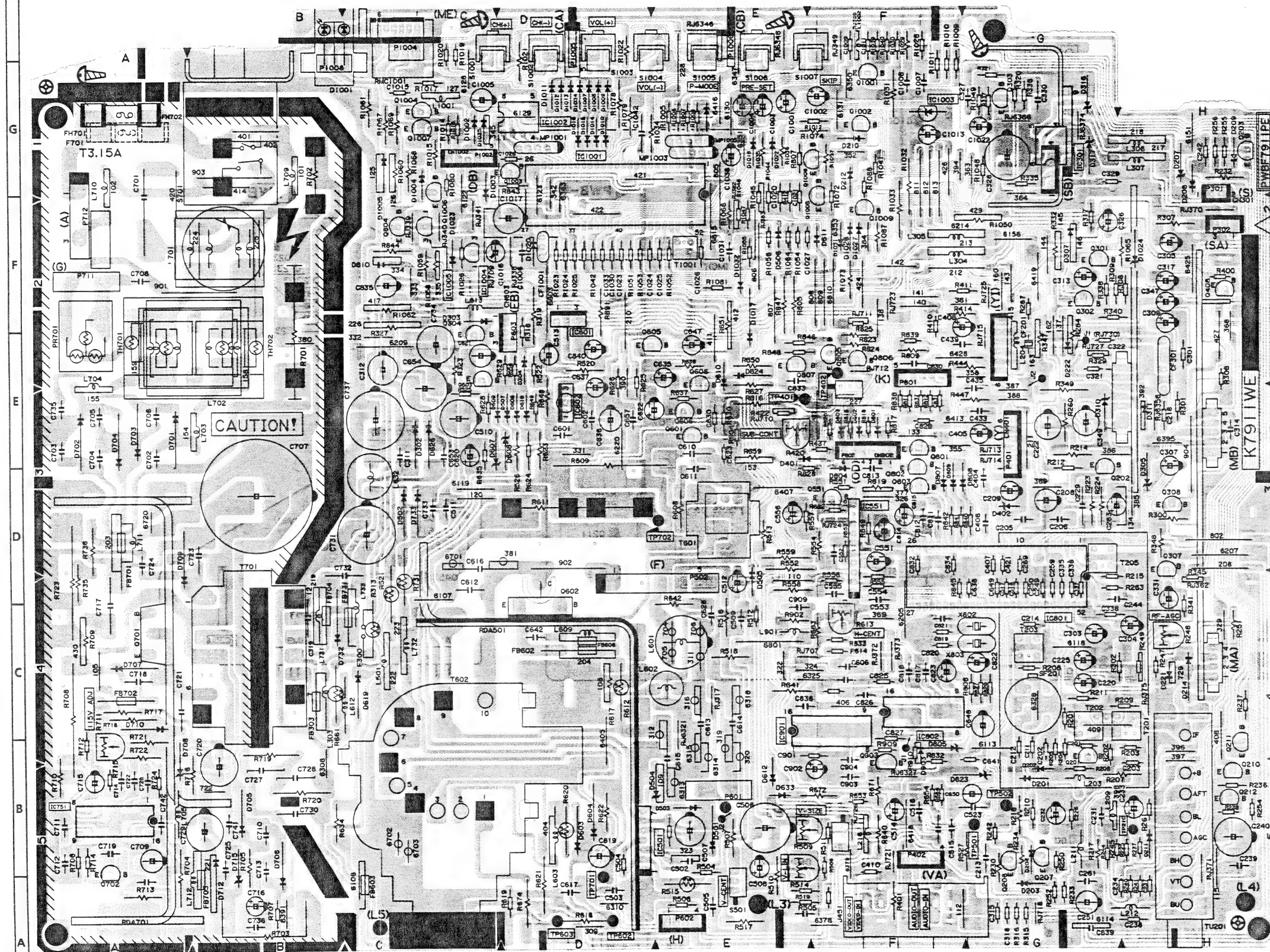


14BN1, 14BN14
14BN1A

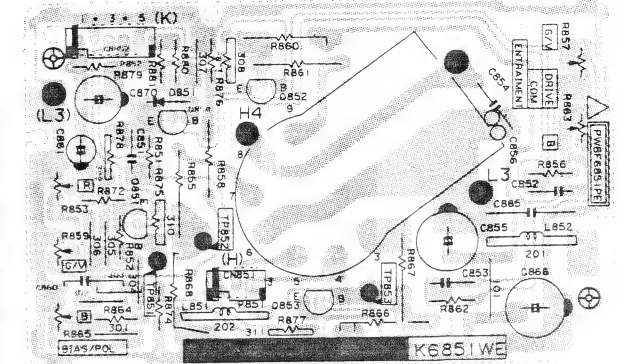
14BN1, 14BN14
14BN1A

PRINTED WIRING BOARD ASSEMBLIES

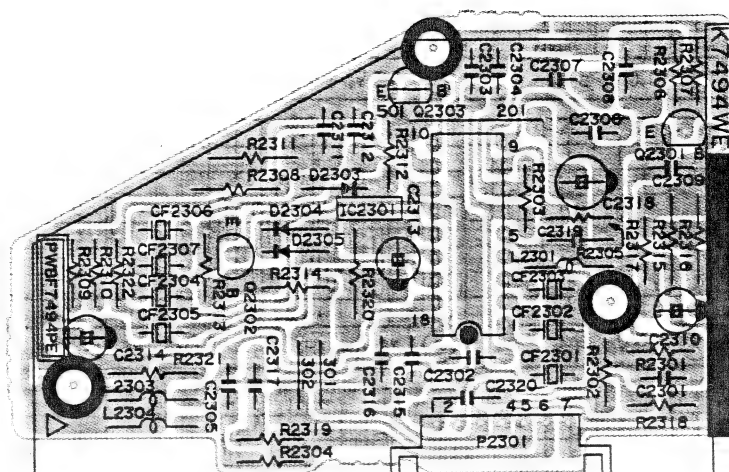
(All the PWBs here are shown as viewed from their wiring sides)



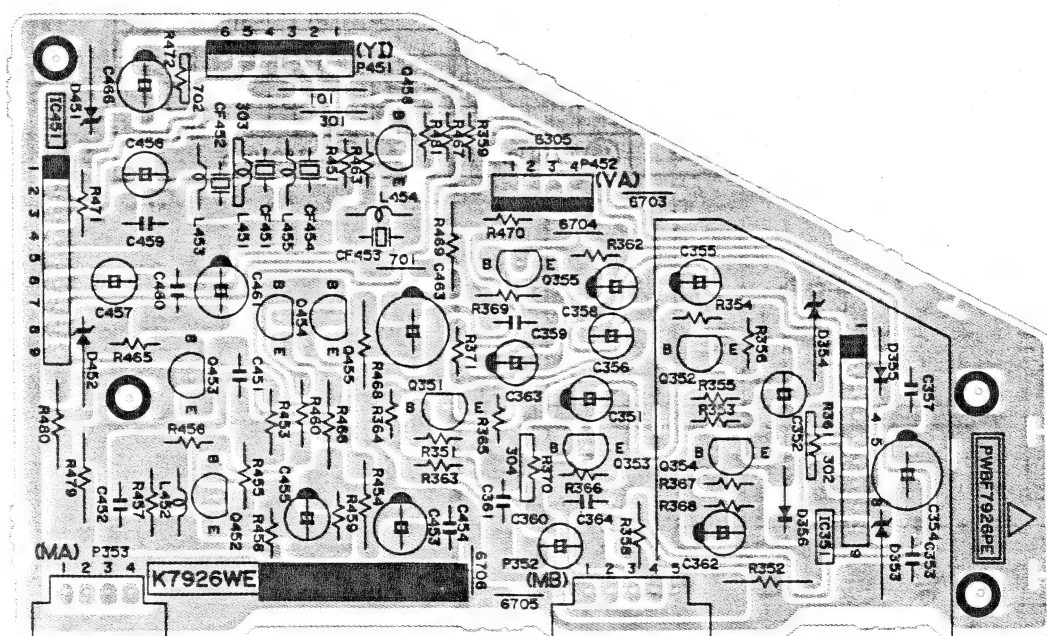
PWB-A: Mother Unit



PWB-B: CRT Socket Unit



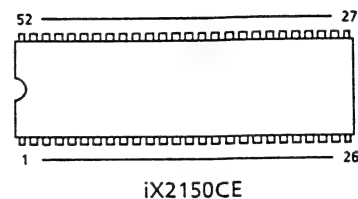
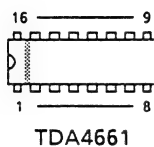
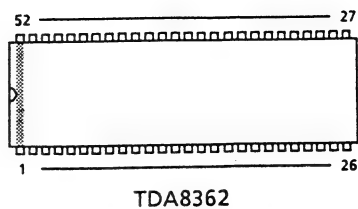
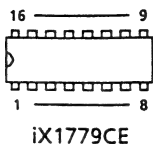
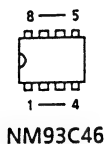
PWB-D: SIF Converter Unit



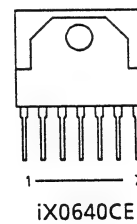
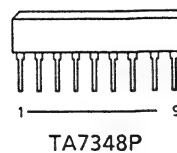
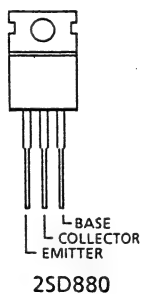
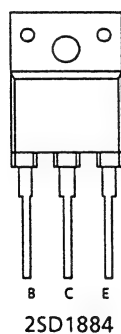
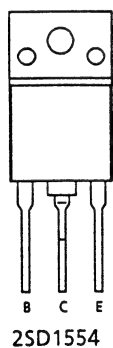
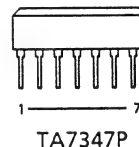
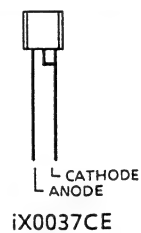
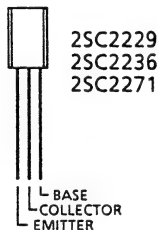
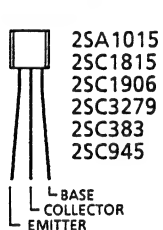
PWB-E: AV Unit

SOLID STATE DEVICE BASE DIAGRAM

TOP VIEW



SIDE VIEW




DESCRIPTION OF SCHEMATIC DIAGRAM

CAUTION: This circuit diagram is original one, therefore there may be a slight difference from yours.

SAFETY NOTE:


1. DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
2. SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH "△" () ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

▲ MARK: X-RAY RELATED PARTS.

SERVICE PRECAUTION:

THE AREA ENCLOSED BY THIS LINE () IS DIRECTLY CONNECTED WITH AC MAINS VOLTAGE. WHEN SERVICING THE AREA, CONNECT AN ISOLATING TRANSFORMER BETWEEN TV RECEIVER AND AC LINE TO ELIMINATE HAZARD OF ELECTRIC SHOCK.

NOTES:

1. The unit of resistance "ohm" is omitted.
(K = 1000 ohms, M = Meg ohm).
2. All resistors are 1/8W, unless otherwise noted.
3. All capacitors are μF , unless otherwise noted.
(P = $\mu\mu F$).
4. The diodes, whose parts code is not described, are the 1SS119.

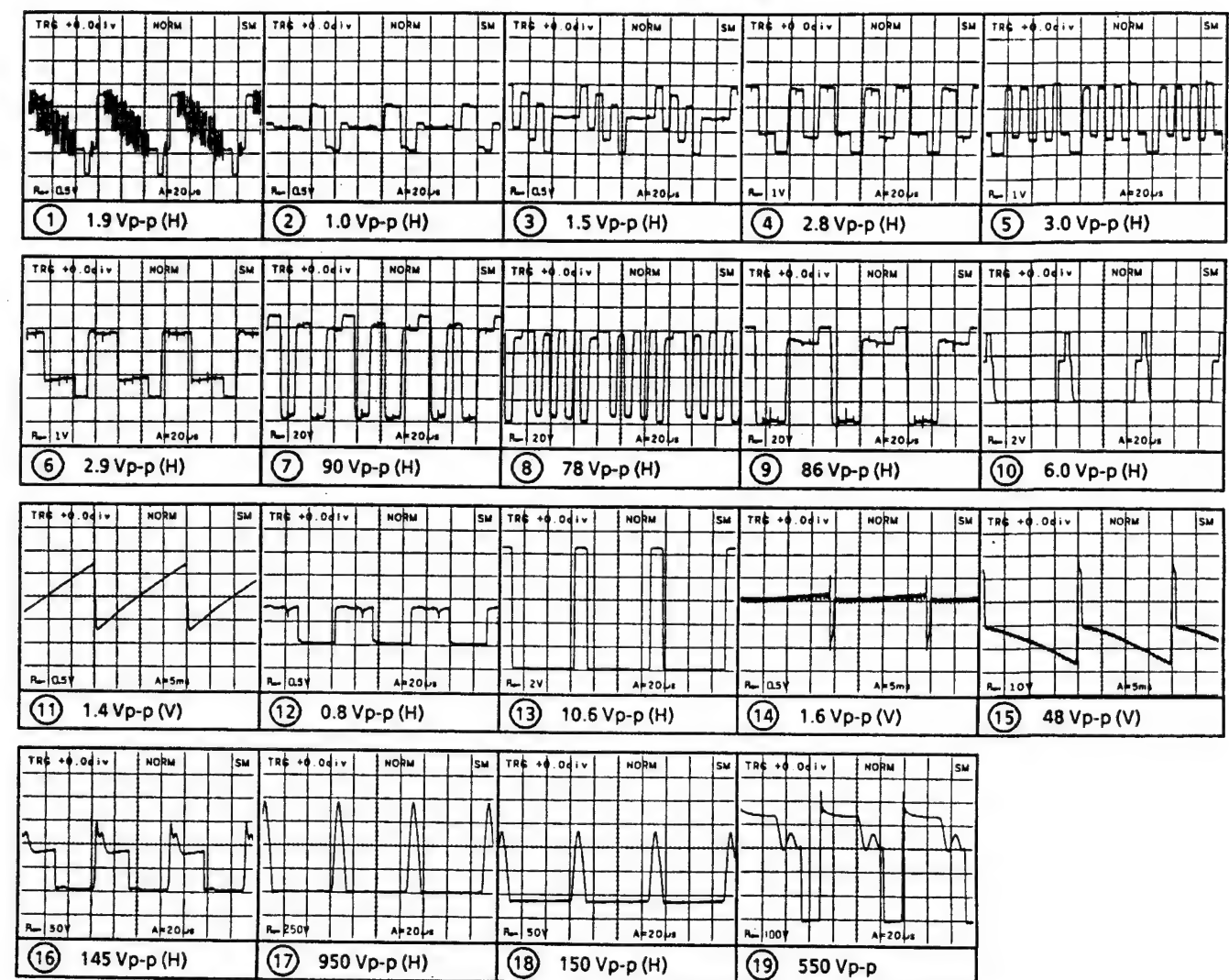
VOLTAGE MEASUREMENT CONDITIONS:

1. The voltage without parenthesis represents the value measured with PAL colour signal.
2. The voltage in parenthesis represents the value measured with no signal.
3. All the voltages were measured by using a high impedance voltmeter.

WAVEFORM MEASUREMENT CONDITIONS:

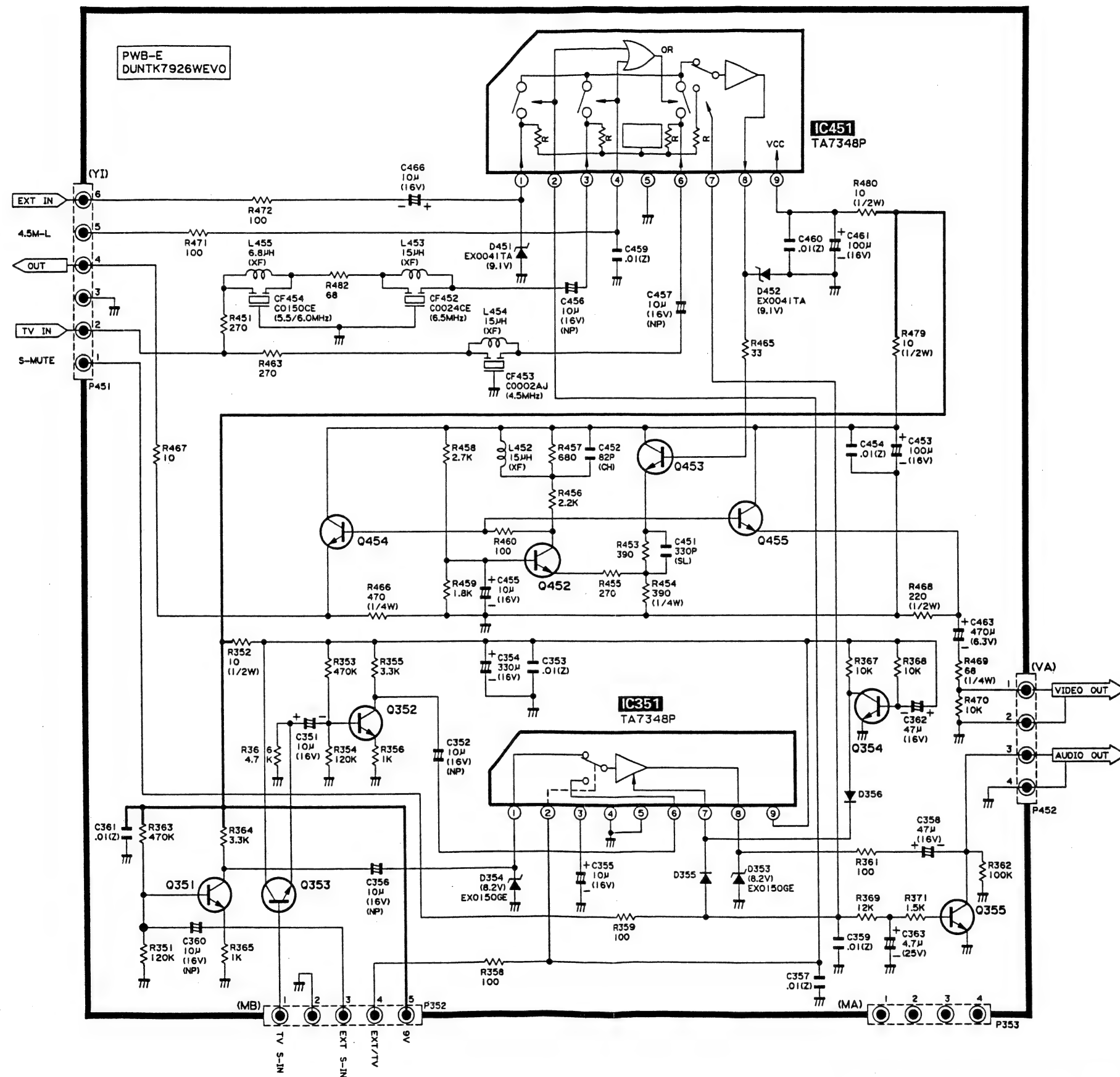
1. The colour bar signal applied to the TP401 is 2.0 Vp-p.
2. The tuner AGC voltage is approximately 4V.

WAVE FORMS



14BN1, 14BN14
14BN1A

AV Unit

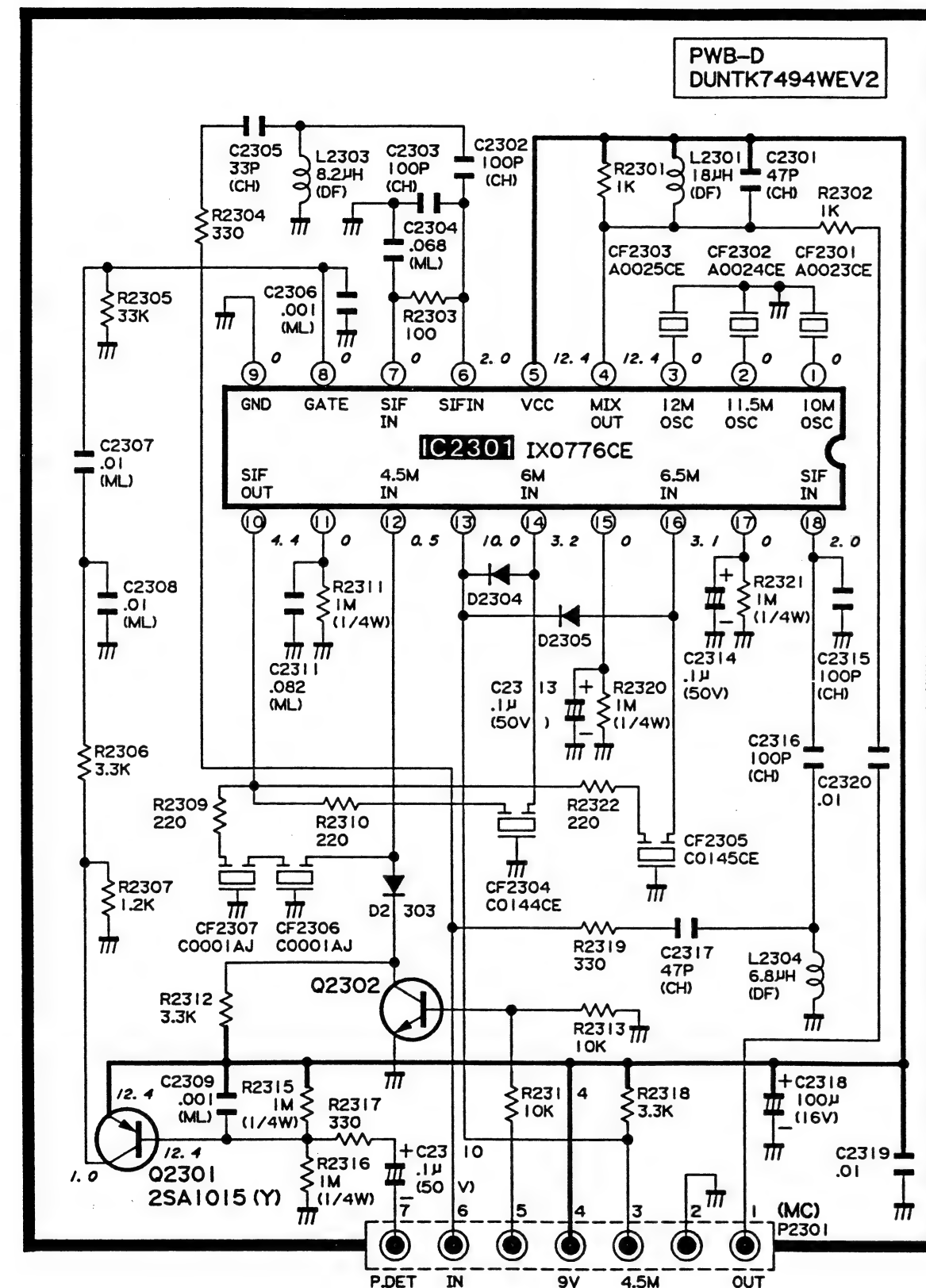


This circuit diagram is original one, therefore there may be a slight difference from yours.

ALL TRANSISTORS ARE
2SC945 OR
2SC1815(GW) AND ALL
DIODES ARE 1SS119,
UNLESS OTHERWISE
NOTED.

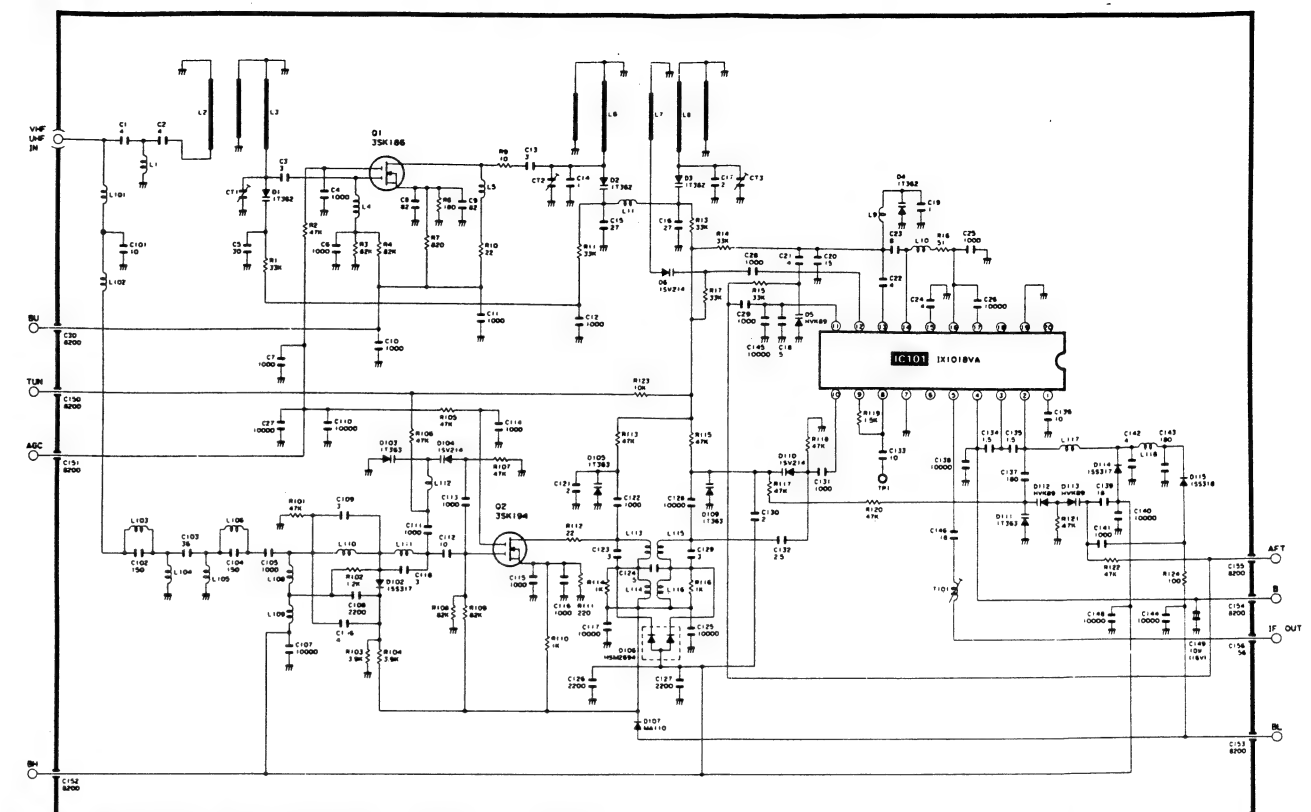
SCHEMATIC DIAGRAM:

■ SIF Converter Unit



■ Tuner

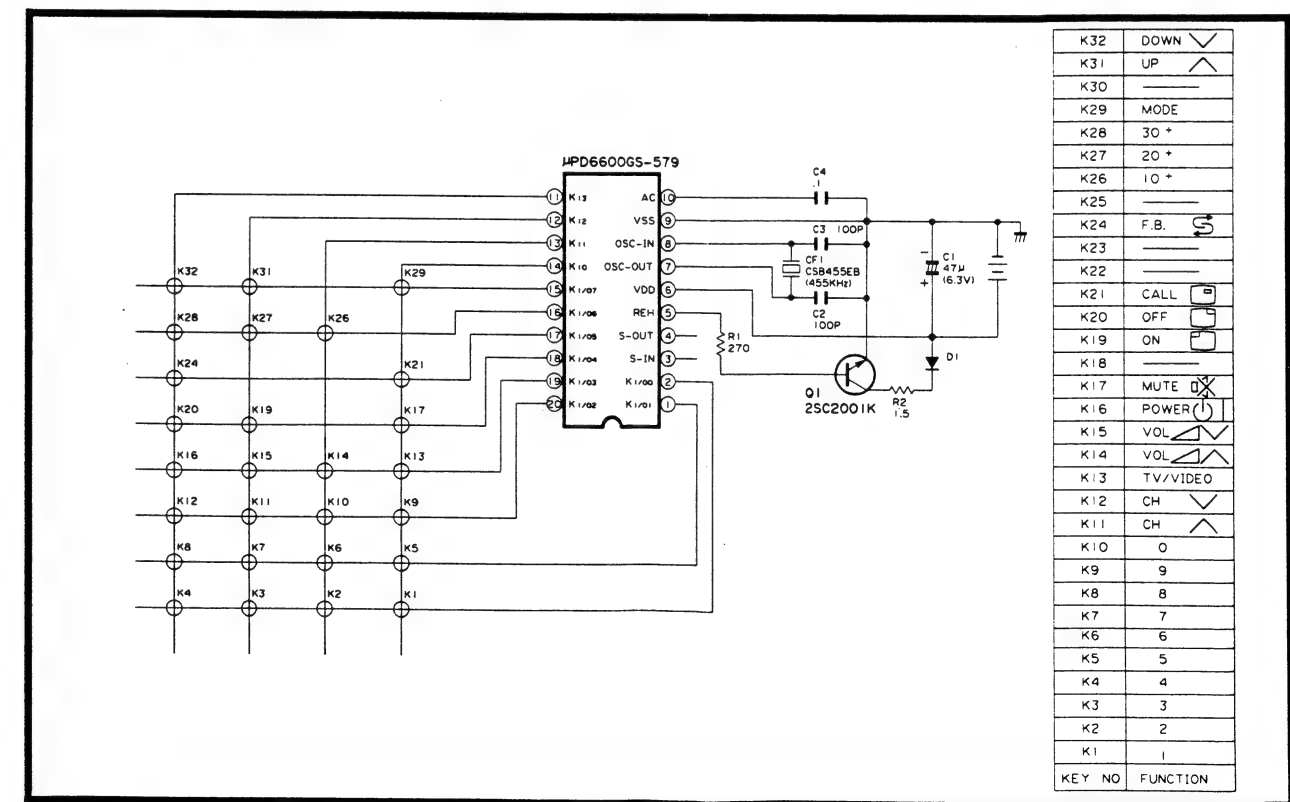
NOTE: The parts here shown are supplied as an assembly but not independently.

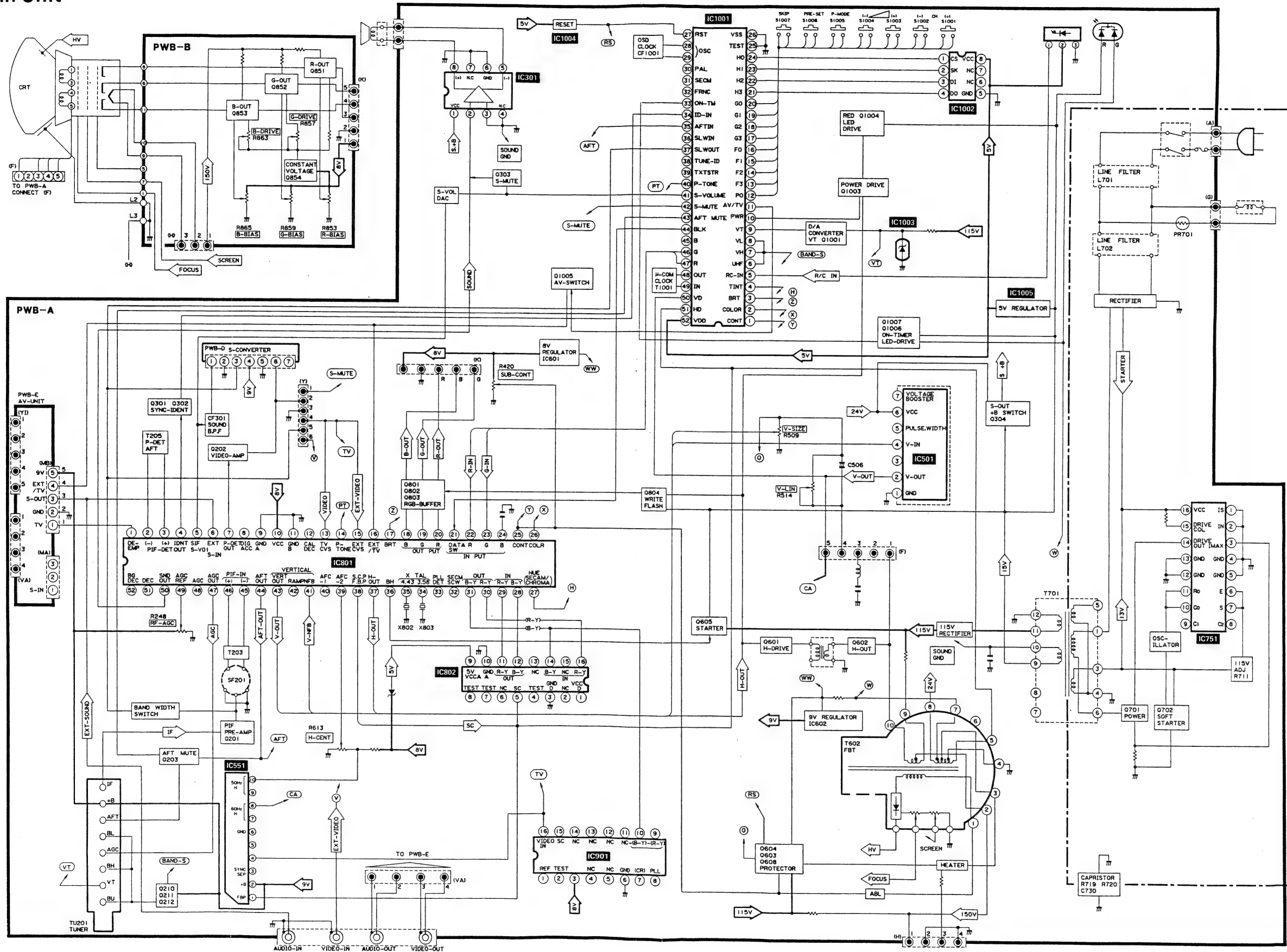


■ Infrared Remote Control Unit

NOTE: The parts here shown are supplied as an assembly but not independently.

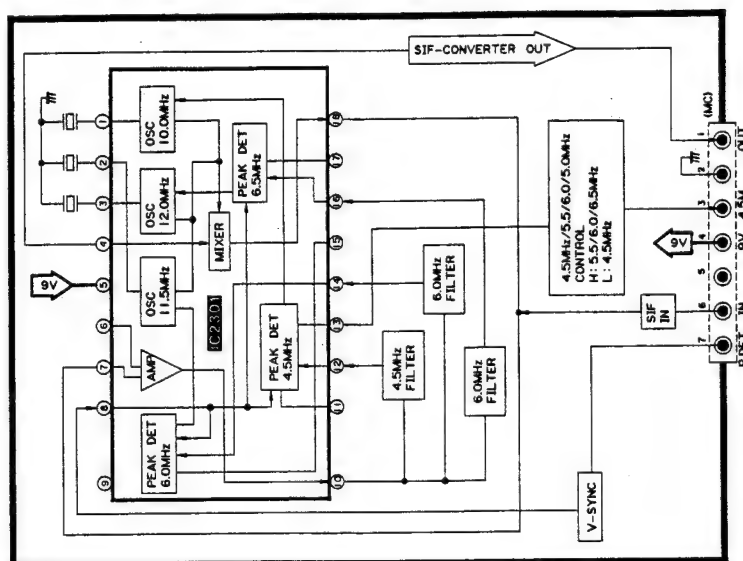
RRMCG0833PESA



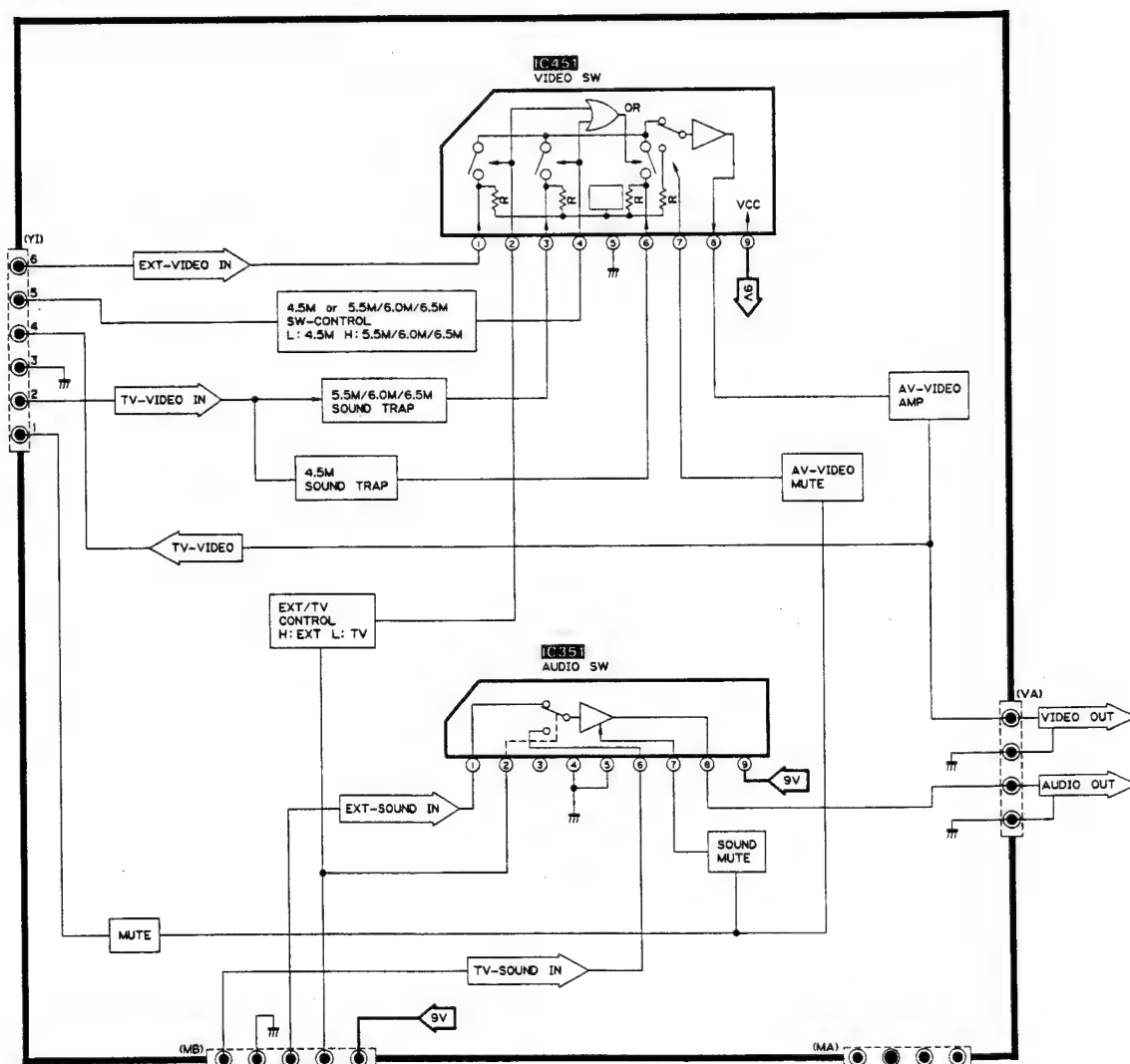
☐ **Main Unit**

BLOCK DIAGRAM:

□ SIF Converter Unit



□ AV Unit



PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual: electrical components having such features are identified by "▲" in the Replacement Parts Lists. Components marked with an (▲) are related to X-Ray Protection circuit.

The use of a substitute replacement part which does not have the same safety characteristics as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

- | | |
|----------------|-------------|
| 1. REF. NO. | 2. PART NO. |
| 3. DESCRIPTION | 4. CODE |

MARK ★: SPARE PARTS-DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code
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PICTURE TUBE

▲ VB1	VB34JLN61X/*5	R	CRT	CA
▲ DY	RCILH0037PEZZ	R	Deflection Yoke	BC
▲ L708	RCILG0023PEZZ	R	Degaussing (ADG) Coil	AN
	LHLDC0001PEZZ	R	ADG Coil Holder, x 4 used	AC
	PMAGF3006CEZZ	J	Purity Magnet	AK
	PSPAG0004PEZZ	R	Wedge, Rubber, x 3 used	AB
	MSPRT0001PEFJ	R	CRT Spring	AC

— End of PICTURE TUBE —

PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)

PWB-A	DUNTK7911WEV0	-	Mother Unit (with PWB-D and E)	—
PWB-B	DUNTK6851WEZ3	-	CRT Socket Unit	—
PWB-C	Not Used			—
PWB-D	DUNTK7494WEV2	-	SIF Converter Unit	—
PWB-E	DUNTK7926WEV0	-	AV Unit	—

— End of P.W.B. ASSEMBLIES —

Ref. No.	Part No.	★	Description	Code
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PWB-A DUNTK7911WEV0 MOTHER UNIT

TUNER

NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

▲ TU201	VTUVTSS6S1///	J	Tuner, VHF/UHF	BB
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INTEGRATED CIRCUITS

IC301	VHiTDA7052/-1	J	Sound Output	AL
IC501	RH-iX0640CEZZ	J	Vertical Output, LA7830	AK
IC551	RH-iX0415CEZZ	J	LA7950	AK
IC601	VHiTA7808S/-1	J	8V Regulator	AD
IC602	VHiTA7809S/-1	J	9V Regulator	AE
▲ IC751	RH-iX1779CEZZ	J	Power Supply	AR
IC801	VHiTDA8362/2E	J	PAL/NTSC TV Processor	BA
IC802	VHiTDA4661/-1	J	64μs Baseband DL	AS
IC901	VHiTDA8395/-1	J	SECAM Decoder	AY
IC1001	RH-iX2150CEZZ	J	Voltage Synthesizer	AZ
IC1002	VHiNM93C46/-1	J		AG
IC1003	RH-iX0037CEZZ	J	Zener IC, UPC574J	AF
IC1004	VHiPST529C2-1	J		AD
IC1005	VHiUPC78L05-4	J	5V Regulator	AD

TRANSISTORS

Q201	VS2SC1906//1E	J	2SC1906	AC
Q202	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q203	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q206	VS2SC945AP/-1	J	2SC945A(P)	AB
Q207	VS2SC945AP/-1	J	2SC945A(P)	AB
Q210	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q211	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q212	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q301	VS2SC945AP/-1	J	2SC945A(P)	AB
Q302	VS2SC945AP/-1	J	2SC945A(P)	AB
Q303	VS2SC945AP/-1	J	2SC945A(P)	AB
Q304	VS2SC2236Y/-1	J	2SC2236(Y)	AD
Q307	VS2SC945AP/-1	J	2SC945A(P)	AB
Q408	VS2SC945AP/-1	J	2SC945A(P)	AB
Q601	VS2SC2271E/-1	J	2SC2271(E)	AD
▲ Q602	VS2SD1877//1E	J	2SD1877	AL
▲ Q603	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q605	VS2SC945AP/-1	J	2SC945A(P)	AB
▲ Q606	VS2SA1015Y/1E	J	2SA1015(Y)	AC
▲ Q608	VS2SC945AP/-1	J	2SC945A(P)	AB
▲ Q701	VS2SD1884//1E	J	2SD1884	AP
▲ Q702	VS2SC945AP/-1	J	2SC945A(P)	AB
Q801	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q802	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q803	VS2SA1015Y/1E	J	2SA1015(Y)	AC

▲ MARK : X-RAY RELATED PARTS.

Ref. No.	Part No.	★	Description	Code
PWB-A DUNTK7911WEV0				
MOTHER UNIT (Continued)				
TRANSISTORS (Continued)				
Q804	VS2SC945AP/-1	J	2SC945A(P)	AB
Q1001	VS2SC383-WT-1	J	2SC383(WT)	AE
Q1002	VS2SC945AP/-1	J	2SC945A(P)	AB
Q1003	VS2SC945AP/-1	J	2SC945A(P)	AB
Q1004	VS2SC945AP/-1	J	2SC945A(P)	AB
Q1005	VS2SC945AP/-1	J	2SC945A(P)	AB
Q1006	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q1007	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q1008	VS2SC945AP/-1	J	2SC945A(P)	AB
DIODES				
D201	VHD1SS119//1E	J	1SS119	AA
D202	VHD1SS119//1E	J	1SS119	AA
D203	VHD1SS119//1E	J	1SS119	AA
D204	VHD1SS119//1E	J	1SS119	AA
D207	RH-EX0030GEZZ	J	Zener Diode	AB
D208	VHD1SS119//1E	J	1SS119	AA
D209	VHD1SS119//1E	J	1SS119	AA
D210	VHD1SS119//1E	J	1SS119	AA
D211	VHD1SS119//1E	J	1SS119	AA
D212	VHD1SS119//1E	J	1SS119	AA
D214	RH-DX0027CEZZ	J		AE
D222	VHD1SS119//1E	J	1SS119	AA
D302	RH-DX0224CEZZ	J		AB
D303	VHD1SS119//1E	J	1SS119	AA
△ D304	VHD1SS119//1E	J	1SS119	AA
D305	RH-EX0310CEZZ	J	Zener Diode, 8.2V	AA
D307	VHD1SS119//1E	J	1SS119	AA
D316	RH-EX0320CEZZ	J	Zener Diode, 12V	AA
D317	RH-EX0320CEZZ	J	Zener Diode, 12V	AA
D401	VHD1SS119//1E	J	1SS119	AA
D501	RH-DX0279CEZZ	J		AB
D502	RH-DX0127CEZZ	J		AC
D503	VHD1SS119//1E	J	1SS119	AA
D505	VHD1SS119//1E	J	1SS119	AA
D506	VHD1SS119//1E	J	1SS119	AA
D507	VHD1SS119//1E	J	1SS119	AA
D603	RH-DX0073CEZZ	J		AD
D604	RH-DX0279CEZZ	J		AB
△ D606	VHD1SS119//1E	J	1SS119	AA
△ D607	RH-EX0338CEZZ	J	Zener Diode	AB
△ D608	RH-EX0215CEZZ	J	Zener Diode	AB
△ D609	VHD1SS119//1E	J	1SS119	AA
D610	VHD1SS119//1E	J	1SS119	AA
D611	VHD1SS119//1E	J	1SS119	AA
D612	VHD1SS119//1E	J	1SS119	AA
△ D618	VHD1SS119//1E	J	1SS119	AA
△ D619	RH-DX0279CEZZ	J		AB
D623	RH-EX0310CEZZ	J	Zener Diode, 8.2V	AA

Ref. No.	Part No.	★	Description	Code
DIODES (Continued)				
D633	VHD1SS119//1E	J	1SS119	AA
△ D701	RH-DX0055TAZZ	J		AD
△ D702	RH-DX0055TAZZ	J		AD
△ D703	RH-DX0055TAZZ	J		AD
△ D704	RH-DX0055TAZZ	J		AD
△ D705	RH-DX0130CEZZ	J		AE
△ D706	RH-DX0130CEZZ	J		AE
△ D707	RH-DX0164CEZZ	J		AC
△ D708	RH-EX0092CEZZ	J	Zener Diode, 3.9V	AB
△ D709	RH-DX0302CEZZ	J		AC
△ D710	RH-DX0027CEZZ	J		AE
△ D712	RH-DX0130CEZZ	J		AE
△ D715	RH-EX0019TAZZ	J	Zener Diode	AB
D732	RH-DX0226CEZZ	J		AC
D733	RH-DX0302CEZZ	J		AC
D801	VHD1SS119//1E	J	1SS119	AA
D802	VHD1SS119//1E	J	1SS119	AA
D803	VHD1SS119//1E	J	1SS119	AA
D805	RH-EX0341GEZZ	J	Zener Diode, 3V	AA
D807	VHD1SS119//1E	J	1SS119	AA
D808	VHD1SS119//1E	J	1SS119	AA
D809	VHD1SS119//1E	J	1SS119	AA
D903	VHD1SS119//1E	J	1SS119	AA
D1001	RH-PX0290CEZZ	J	LED, Red/Green	AC
D1004	VHD1SS119//1E	J	1SS119	AA
D1005	VHD1SS119//1E	J	1SS119	AA
D1008	VHD1SS119//1E	J	1SS119	AA
D1010	VHD1SS119//1E	J	1SS119	AA
D1012	VHD1SS119//1E	J	1SS119	AA
D1013	VHD1SS119//1E	J	1SS119	AA
D1017	VHD1SS119//1E	J	1SS119	AA
D1018	VHD1SS119//1E	J	1SS119	AA
D1020	VHD1SS119//1E	J	1SS119	AA
D1022	VHD1SS119//1E	J	1SS119	AA
D1023	VHD1SS119//1E	J	1SS119	AA
D1024	RH-EX0292CEZZ	J	Zener Diode, 4.2V	AA
D1026	VHD1SS119//1E	J	1SS119	AA
D1027	VHD1SS119//1E	J	1SS119	AA
D1031	VHD1SS119//1E	J	1SS119	AA
D1032	VHD1SS119//1E	J	1SS119	AA

PACKAGED CIRCUITS

MP1001	RMPTC0282CEZZ	J	Resistor 6.8k×4	AC
MP1003	RMPTC0282CEZZ	J	Resistor 6.8k×4	AC
MP1005	RMPTC0011CEZZ	J	Capacitor 220p×4	AC
△ PR701	RMPTP0061CEZZ	J	Positive Coefficient Thermistor	AV
X802	RCRSB0008PEZZ	R	Crystal, 4.43MHz	AH
X803	RCRSB0009PEZZ	R	Crystal, 3.58MHz	AL

Ref. No.	Part No.	*	Description	Code
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PWB-A DUNTK7911WEV0 **MOTHER UNIT (Continued)**

COILS AND TRANSFORMERS

CF301	RFILC0061CEZZ	J	Ceramic Filter	AF
CF1001	RFILC0094GEZZ	J	Ceramic Filter	AC
L203	VP-XFR56K0000	J	Coil, 0.56 μ H	AB
L211	VP-DF120K0000	J	Coil, 12 μ H	AB
L212	VP-DF270K0000	J	Coil, 27 μ H	AB
L216	VP-DF120K0000	J	Coil, 12 μ H	AB
L303	VP-CF3R3K0000	J	Coil, 3.3 μ H	AB
L304	VP-CF3R3K0000	J	Coil, 3.3 μ H	AB
L305	VP-CF3R3K0000	J	Coil, 3.3 μ H	AB
▲ L601	RCiLZ0004PEZZ	R	Peaking Coil	AN
L602	RCiLP0088CEZZ	J	Coil	AG
L603	VP-CF100K0000	J	Coil, 10 μ H	AB
L609	VP-CF1R5M0000	J	Coil, 1.5 μ H	AB
L632	RCiLP0050CEZZ	J	Peaking Coil	AE
△ L701	RCiLF0007PEZZ	R	Coil, Line Filter	AL
△ L702	RCiLF0087CEZZ	J	Coil, Line Filter	AL
△ L705	VP-CF3R3K0000	J	Coil, 3.3 μ H	AB
△ L711	RCiLP0093CEZZ	J	Peaking Coil	AE
△ L712	VP-CF330K0000	J	Coil, 33 μ H	AB
L731	VP-CF3R3K0000	J	Coil, 3.3 μ H	AB
L732	VP-CF3R3K0000	J	Coil, 3.3 μ H	AB
L733	RCiLP0093CEZZ	J	Peaking Coil	AE
L901	VP-XF8R2K0000	J	Coil, 8.2 μ H	AB
L1001	VP-XF101K0000	J	Coil, 100 μ H	AB
L1002	VP-XF120K0000	J	Coil, 12 μ H	AB
SF201	RFILC0203CEZZ	J	Surface Accoustic Wave Filter	AN
T203	RCiLi0543CEZZ	J	S.A.W. Matching Trans.	AD
T205	RCiLD0130CEZZ	J	PIF Detector Coil	AD
△ T601	RTRNZ0179CEZZ	J	Horiz. Drive Trans.	AE
▲△ T602	RTRNF0063PEZZ	R	Flyback Trans. (F.B.T.) W/ Focus, Screen Controls	BE
▲△ T701	RTRNZ0041PEZZ	R	Power Reg. Trans.	AX
T1001	RCiLB0004PEZZ	R	Sign Position Adj. Coil	AF

CONTROLS

R248	RVR-M4626GEZZ	J	10k(B) RF-AGC	AB
R420	RVR-M4626GEZZ	J	10k(B) Sub-Contrast	AB
R509	RVR-M4616GEZZ	J	220(B) Vertical Size	AB
R613	RVR-M4626GEZZ	J	10k(B) Horiz. Centre	AB
△ R711	RVR-M4356GEZZ	J	220(B) 115V Adj.	AB

Ref. No.	Part No.	*	Description	Code
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CAPACITORS

C201	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C202	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C203	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C205	VCFYHA1HA474J	J	0.47 50V M. Polyester	AD
C206	VCQYSH1HM104K	J	0.1 50V Mylar	AB
C208	VCEAGA1AW227M	J	220 10V Electrolytic	AB
C209	VCEAGA1HW105T	J	1 50V Electrolytic	AB
C211	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C212	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C213	VCKYD41HB102K	J	1000p50V Ceramic	AA
C214	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C218	VCKYMN1HB101K	J	100p 50V Ceramic	AA
C220	VCSATA1VE225K	J	2.2 35V Tantalum	AC
C222	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C225	VCEAGA1HW105M	J	1 50V Electrolytic	AC
C226	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C231	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
C232	VCEAGA1CW476M	J	47 16V Electrolytic	AB
C233	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C234	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C239	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
C240	VCEAGA1AW108M	J	1000 10V Electrolytic	AC
C242	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C244	VCCCPA1HH8R0D	J	8p 50V Ceramic	AA
C249	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C250	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C251	VCEAGA1CW107M	J	100 16V Electrolytic	AA
C252	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C259	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C269	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C301	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C303	VCEAGA1HW475M	J	4.7 50V Electrolytic	AB
C304	VCEAGA1HW225M	J	2.2 50V Electrolytic	AB
C307	VCEAGA1HW105M	J	1 50V Electrolytic	AB
C309	VCEAGA1EW475M	J	4.7 25V Electrolytic	AA
C311	VCKYPA2HB102K	J	1000p500V Ceramic	AA
C312	VCEAGA1CW337M	J	330 16V Electrolytic	AC
C313	VCEAGA1HW104M	J	0.1 50V Electrolytic	AA
C314	VCQYSH1HM332K	J	3300p50V Mylar	AA
C315	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C317	VCEAGA1HW105M	J	1 50V Electrolytic	AC
C319	VCKYD41CY103N	J	0.01 16V Ceramic	AA
C326	VCEAGA1HW225M	J	2.2 50V Electrolytic	AB
C327	VCKYPA1HB332K	J	3300p50V Ceramic	AA
C328	VCEAGA1CW477M	J	470 16V Electrolytic	AC
C329	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C331	VCEAGA1AW476M	J	47 10V Electrolytic	AA
C335	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C337	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C338	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C347	VCEAGA1AW107M	J	100 10V Electrolytic	AB
C404	VCFYHA1HA473J	J	0.047 50V M. Polyester	AB
C405	VCEAGA1HW105M	J	1 50V Electrolytic	AC
C406	VCFYHA1HA473J	J	0.047 50V M. Polyester	AB

▲ MARK : X-RAY RELATED PARTS.

Ref. No.	Part No.	*	Description	Code
PWB-A DUNTK7911WEV0 MOTHER UNIT (Continued)				
CAPACITORS (Continued)				
C407	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C408	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C421	VCKYMN1HB101K	J	100p 50V Ceramic	AA
C439	VCCSPA1HL181J	J	180p 50V Ceramic	AA
C502	VCKYPA1HB471K	J	470p 50V Ceramic	AA
C503	VCQYSH1HM272K	J	2700p50V Mylar	AA
C504	VCKYMN1HB102K	J	1000p50V Ceramic	AA
C505	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
C506	VCEAGA1EW108M	J	1000 25V Electrolytic	AD
C507	VCEAGA1EW227M	J	220 25V Electrolytic	AC
C508	VCSATA1VE225K	J	2.2 35V Tantalum	AC
C509	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
C510	VCEAGA1VW477M	J	470 35V Electrolytic	AD
C511	VCKYPA2HB102K	J	1000p500V Ceramic	AA
C512	VCEAGA1HW474M	J	0.47 50V Electrolytic	AA
C513	VCEAGA1HW105M	J	1 50V Electrolytic	AC
C514	VCSATA1VE104K	J	0.1 35V Tantalum	AC
C515	VCQYSH1HM472K	J	4700p50V Mylar	AA
C518	VCKYPA1HB102K	J	1000p50V Ceramic	AA
C551	VCEAGA1HW474M	J	0.47 50V Electrolytic	AA
C552	VCQYSH1HM152K	J	1500p50V Mylar	AA
C553	VCQYSH1HM333K	J	0.033 50V Mylar	AB
C554	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C555	VCQYSH1HM333K	J	0.033 50V Mylar	AB
C556	VCEAGA1HW105M	J	1 50V Electrolytic	AC
C601	VCFYHA1HA334J	J	0.33 50V M. Polyester	AC
▲△ C602	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
C606	VCQYSH1HM103K	J	0.01 50V Mylar	AA
C610	VCFYSB2EB823J	J	0.082 250V M. Polyester	AD
C611	VCKYPA2HB102K	J	1000p500V Ceramic	AA
▲ C612	RC-KZ0038CEZZ	J	470p 2kV Ceramic	AB
C613	VCFPD2DB334J	J	0.33 200V M. Polyester	AF
C614	VCQPSC2DA104J	J	0.1 200V Polypro Film	AC
C615	VCQPSD2DA224J	J	0.22 200V Polypro Film	AD
▲ C616	VCFPD3CA682H	J	6800p 1.6kV Polypro Film	AE
C617	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
C619	VCEAGA2AW106M	J	10 100V Electrolytic	AC
△ C620	VCEAGA1HW105M	J	1 50V Electrolytic	AC
△ C621	VCEAGA0JW337M	J	330 6.3V Electrolytic	AB
△ C622	VCEAGA1CW476M	J	47 16V Electrolytic	AB
C623	VCKYMN1HB471K	J	470p 50V Ceramic	AA
C628	VCKYPA2HB221K	J	220p 500V Ceramic	AA
△ C630	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
△ C635	VCEAGA1CW476M	J	47 16V Electrolytic	AB
C636	VCEAGA1CW476M	J	47 16V Electrolytic	AB
C637	VCEAGA1CW476M	J	47 10V Electrolytic	AB
C638	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C639	VCKYD41HB101K	J	100p 50V Ceramic	AA
C642	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C647	VCEAGA1HW335M	J	3.3 50V Electrolytic	AB
C648	VCEAGA1AW227M	J	220 10V Electrolytic	AB

Ref. No.	Part No.	*	Description	Code
CAPACITORS (Continued)				
C649	VCKYMN1CX472N	J	4700p16V Ceramic	AA
C650	VCE9AA1HW105M	J	1 50V Elect. (N.P)	AB
△ C657	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
△ C701	RC-FZ0078CEZZ	J	0.47 AC250V Special	AF
△ C702	RC-KZ0029CEZZ	J	0.01 AC250V Ceramic	AC
△ C703	RC-KZ0029CEZZ	J	0.01 AC250V Ceramic	AC
△ C704	RC-KZ0029CEZZ	J	0.01 AC250V Ceramic	AC
△ C705	RC-KZ0029CEZZ	J	0.01 AC250V Ceramic	AC
△ C706	RC-KZ0029CEZZ	J	0.01 AC250V Ceramic	AC
△ C707	RC-EZ0285CEZZ	J	330 400V Electrolytic	AR
△ C708	RC-KZ0029CEZZ	J	0.01 AC250V Ceramic	AC
△ C709	VCEAGA1EW107M	J	100 25V Electrolytic	AD
△ C710	VCKYPA2HB102K	J	1000p500V Ceramic	AA
△ C711	VCCSPA1HL471J	J	470p 50V Ceramic	AA
△ C712	VCFYHA1HA474J	J	0.47 50V M. Polyester	AD
△ C713	VCKYPA2HB102K	J	1000p500V Ceramic	AA
△ C714	VCQYSH1HM563K	J	0.056 50V M. Polyester	AB
△ C715	VCEAGA1HW105M	J	1 50V Electrolytic	AC
△ C716	VCEAGA1HW105M	J	1 50V Electrolytic	AC
△ C717	VCQPSC2JA333K	J	0.033 630V Polypro Film	AB
△ C718	VCKYPH3DB561K	J	560p 2kV Ceramic	AC
△ C719	VCQYSH1HM273K	J	0.027 50V Mylar	AB
△ C720	VCEAGA1JW476M	J	47 63V Electrolytic	AB
△ C721	RC-KZ0024CEZZ	J	1000p2kV Ceramic	AC
△ C723	VCKYPA2HB102K	J	1000p500V Ceramic	AA
△ C724	RC-KZ0029CEZZ	J	0.01 AC250V Ceramic	AC
△ C725	VCFYHA1HA474J	J	0.47 50V M. Polyester	AD
△ C726	VCKYPA1HB331K	J	330p 50V Ceramic	AA
△ C729	VCEAGA1EW477M	J	470 25V Electrolytic	AD
△ C730	RC-KZ0128CEZZ	J	2200p4kV Ceramic	AD
C731	VCEAGH2CW107M	J	100 160V Electrolytic	AE
C732	RC-KZ0024CEZZ	J	1000p2kV Ceramic	AC
C733	VCKYPA2HB102K	J	1000p500V Ceramic	AA
C734	VCEAGA1EW477M	J	470 25V Electrolytic	AD
C737	VCEAGH2CW107M	J	100 160V Electrolytic	AE
△ C741	VCKYPA2HB472K	J	4700p500V Ceramic	AB
△ C742	VCFYHA1HA474J	J	0.47 50V M. Polyester	AD
C811	VCQYSH1HM103K	J	0.01 50V Mylar	AA
C812	VCQYSH1HM103K	J	0.01 50V Mylar	AA
C813	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C814	VCEAGA1HW225M	J	2.2 50V Electrolytic	AB
C815	VCEAGA1HW475M	J	4.7 50V Electrolytic	AB
C817	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
C818	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
C819	VCCCMN1HH180J	J	18p 50V Ceramic	AA
C820	VCCCMN1HH180J	J	18p 50V Ceramic	AA
C821	VCKYPA1HB472K	J	4700p50V Ceramic	AA
C822	VCEAGA1HW104M	J	0.1 50V Electrolytic	AA
C823	VCEAGA1AW476M	J	47 10V Electrolytic	AA
C825	VCKYMN1HB102K	J	1000p50V Ceramic	AA
C826	VCKYPA1HB102K	J	1000p50V Ceramic	AA
C827	VCKYMN1CY103N	J	0.01 16V Ceramic	AA
C829	VCCSMN1HL560J	J	56p 50V Ceramic	AA
C830	VCCSD41HL560J	J	56p 50V Ceramic	AA

▲ MARK : X-RAY RELATED PARTS.

Ref. No.	Part No.	*	Description	Code
PWB-A DUNTK7911WEV0				
MOTHER UNIT (Continued)				
CAPACITORS (Continued)				
C831	VCCSMN1HL560J	J 56p	50V Ceramic	AA
C836	VCCSPA1HL390J	J 39p	50V Ceramic	AA
C840	VCEAGA1CW106M	J 10	16V Electrolytic	AA
C901	VCKYMN1CY103N	J 0.01	16V Ceramic	AA
C902	VCEAGA1CW476M	J 47	16V Electrolytic	AB
C903	VCFYHA1HA104J	J 0.1	50V M. Polyester	AB
C904	VCFYHA1HA224J	J 0.22	50V M. Polyester	AC
C909	VCCCPA1HH680J	J 68p	50V Ceramic	AA
C1001	VCEAGA1HW225M	J 2.2	50V Electrolytic	AB
C1002	VCEAGA1HW225M	J 2.2	50V Electrolytic	AB
C1003	VCEAGA1HW225M	J 2.2	50V Electrolytic	AB
C1004	VCEAGA1HW475M	J 4.7	50V Electrolytic	AB
C1005	VCEAGA0JW337M	J 330	6.3V Electrolytic	AB
C1007	VCFYHA1HA104J	J 0.1	50V M. Polyester	AB
C1008	VCFYHA1HA104J	J 0.1	50V M. Polyester	AB
C1009	VCKYMN1HB101K	J 100p	50V Ceramic	AA
C1011	VCKYMN1HB101K	J 100p	50V Ceramic	AA
C1013	VCEAGA1HW106M	J 10	50V Electrolytic	AC
C1015	VCKYMN1CY103N	J 0.01	16V Ceramic	AA
C1016	VCEAGA1HW335M	J 3.3	50V Electrolytic	AB
C1017	VCEAGA1AW477M	J 470	10V Electrolytic	AC
C1020	VCKYMN1HB101K	J 100p	50V Ceramic	AA
C1021	VCKYMN1HB101K	J 100p	50V Ceramic	AA
C1022	VCEAGA1CW226M	J 22	16V Electrolytic	AA
C1023	VCKYMN1HB151K	J 150p	50V Ceramic	AA
C1024	VCKYMN1HB151K	J 150p	50V Ceramic	AA
C1025	VCKYMN1HB151K	J 150p	50V Ceramic	AA
C1026	VCKYMN1HB101K	J 100p	50V Ceramic	AA
C1027	VCKYMN1HB331K	J 330p	50V Ceramic	AA
C1028	VCKYMN1CY103N	J 0.01	16V Ceramic	AA
C1030	VCKYMN1HB221K	J 220p	50V Ceramic	AA
C1031	VCFYHA1HA104J	J 0.1	50V M. Polyester	AB
C1032	VCKYMN1HB471K	J 470p	50V Ceramic	AA
C1033	VCKYMN1HB221K	J 220p	50V Ceramic	AA
C1038	VCEAGA1AW107M	J 100	10V Electrolytic	AB
C1042	VCKYD41HB101K	J 100k	50V Ceramic	AB

Ref. No.	Part No.	*	Description	Code
RESISTORS				
R202	VRD-MN2BE562J	J 5.6k	1/8W Carbon	AA
R203	VRD-MN2BE392J	J 3.9k	1/8W Carbon	AA
R204	VRD-MN2BE220J	J 22	1/8W Carbon	AA
R205	VRD-MN2BE151J	J 150	1/8W Carbon	AA
R206	VRD-MN2BE332J	J 3.3k	1/8W Carbon	AA
R207	VRD-RA2EE221J	J 220	1/4W Carbon	AA
R208	VRD-MN2BE103J	J 10k	1/8W Carbon	AA
R209	VRD-MN2BE151J	J 150	1/8W Carbon	AA
R210	VRD-MN2BE561J	J 560	1/8W Carbon	AA
R211	VRD-MN2BE561J	J 560	1/8W Carbon	AA
R212	VRD-RA2BE100J	J 10	1/8W Carbon	AA
R214	VRD-RM2HD221J	J 220	1/2W Carbon	AA
R215	VRD-MN2BE682J	J 6.8k	1/8W Carbon	AA
R217	VRD-RA2BE822J	J 8.2k	1/8W Carbon	AA
R218	VRD-RA2BE561J	J 560	1/8W Carbon	AA
R223	VRD-RA2BE102J	J 1k	1/8W Carbon	AA
R224	VRD-RA2BE821J	J 820	1/8W Carbon	AA
R225	VRD-MN2BE223J	J 22k	1/8W Carbon	AA
R230	VRD-RA2BE153J	J 15k	1/8W Carbon	AA
R232	VRD-RA2EE681J	J 680	1/4W Carbon	AA
R233	VRD-MN2BE474J	J 470k	1/8W Carbon	AA
R234	VRD-RA2BE393J	J 39k	1/8W Carbon	AA
R236	VRD-MN2BE472J	J 4.7k	1/8W Carbon	AA
R237	VRD-MN2BE472J	J 4.7k	1/8W Carbon	AA
R238	VRD-MN2BE472J	J 4.7k	1/8W Carbon	AA
R240	VRD-MN2BE104J	J 100k	1/8W Carbon	AA
R241	VRD-MN2BE684J	J 680k	1/8W Carbon	AA
R242	VRD-MN2BE393J	J 39k	1/8W Carbon	AA
R244	VRD-MN2BE393J	J 39k	1/8W Carbon	AA
R247	VRD-MN2BE123J	J 12k	1/8W Carbon	AA
R248	<i>See Controls</i>			
R250	VRD-MN2BE153J	J 15k	1/8W Carbon	AA
R251	VRD-RA2BE153J	J 15k	1/8W Carbon	AA
R252	VRD-MN2BE222J	J 2.2k	1/8W Carbon	AA
R254	VRD-MN2BE333J	J 33k	1/8W Carbon	AA
R255	VRD-MN2BE473J	J 47k	1/8W Carbon	AA
R256	VRD-MN2BE104J	J 100k	1/8W Carbon	AA
R260	VRD-RM2HD150J	J 15	1/2W Carbon	AA
R263	VRD-MN2BE471J	J 470	1/8W Carbon	AA
R277	VRD-MN2BE123J	J 12k	1/8W Carbon	AA
R301	VRD-MN2BE102J	J 1k	1/8W Carbon	AA
R302	VRD-MN2BE472J	J 4.7k	1/8W Carbon	AA
R306	VRD-MN2BE103J	J 10k	1/8W Carbon	AA
R308	VRD-MN2BE103J	J 10k	1/8W Carbon	AA
R309	VRD-RA2BE472J	J 4.7k	1/8W Carbon	AA
△ R313	RR-XZ0084CEZZ	J 1	1/4W Fuse Resistor	AB
R315	VRD-RA2BE822J	J 8.2k	1/8W Carbon	AA
R316	VRD-MN2BE822J	J 8.2k	1/8W Carbon	AA
R317	VRD-MN2BE103J	J 10k	1/8W Carbon	AA
△ R318	VRD-MN2BE682J	J 6.8k	1/8W Carbon	AA
△ R319	VRD-RA2BE104J	J 100k	1/8W Carbon	AA
R320	VRD-MN2BE822J	J 8.2k	1/8W Carbon	AA
R321	VRD-MN2BE103J	J 10k	1/8W Carbon	AA
R323	VRD-RA2BE102J	J 1k	1/8W Carbon	AA

Ref. No.	Part No.	*	Description	Code	Ref. No.	Part No.	*	Description	Code
PWB-A DUNTK7911WEV0 MOTHER UNIT (Continued)					RESISTORS (Continued)				
RESISTORS (Continued)					R613	<i>See Controls</i>			
R327	VRN-RV3AB8R2J	J	8.2 1W Metal Film	AB	R614	VRD-MN2BE824J	J	820k 1/8W Carbon	AA
R332	VRD-RA2BE103J	J	10k 1/8W Carbon	AA	R616	VRD-RA2BE104J	J	100k 1/8W Carbon	AA
R335	VRD-MN2BE102J	J	1k 1/8W Carbon	AA	R618	VRS-PU2HB102J	J	1k 1/2W Metal Oxide	AA
R337	VRD-MN2BE102J	J	1k 1/8W Carbon	AA	R619	VRD-MN2BE183J	J	18k 1/8W Carbon	AA
R338	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA	△ R620	RR-XZ0035TAZZ	J	22 1/4W Fuse Resistor	AB
R340	VRD-MN2BE103J	J	10k 1/8W Carbon	AA	▲ R621	VRN-RV3AB1R2J	J	1.2 1W Metal Film	AB
R341	VRD-MN2BE472J	J	4.7k 1/8W Carbon	AA	R622	VRD-RM2HD223J	J	22k 1/2W Carbon	AA
R345	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	△ R623	VRD-RA2EE125J	J	1.2M1/4W Carbon	AA
R347	VRD-RA2BE101J	J	100 1/8W Carbon	AA	△ R624	VRD-MN2BE274J	J	270k 1/8W Carbon	AA
R348	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	R625	VRD-MN2BE104J	J	100k 1/8W Carbon	AA
R349	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA	R626	VRD-MN2BE103J	J	10k 1/8W Carbon	AA
R400	VRD-MN2BE103J	J	10k 1/8W Carbon	AA	R627	VRD-RA2BE151J	J	150 1/8W Carbon	AA
R401	VRD-RA2EE820J	J	82 1/4W Carbon	AA	△ R628	VRD-MN2BE223J	J	22k 1/8W Carbon	AA
R410	VRD-MN2BE153J	J	15k 1/8W Carbon	AA	△ R629	VRD-MN2BE123J	J	12k 1/8W Carbon	AA
R411	VRD-MN2BE223J	J	22k 1/8W Carbon	AA	△ R630	VRD-MN2BE472J	J	4.7k 1/8W Carbon	AA
R412	VRD-RA2BE333J	J	33k 1/8W Carbon	AA	▲ R634	VRD-RM2HD220J	J	22 1/2W Carbon	AA
R414	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	▲△ R635	VRD-MN2BE223J	J	22k 1/8W Carbon	AA
R420	<i>See Controls</i>				△ R636	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R422	VRD-MN2BE823J	J	82k 1/8W Carbon	AA	△ R637	VRD-MN2BE472J	J	4.7k 1/8W Carbon	AA
R437	VRD-MN2BE683J	J	68k 1/8W Carbon	AA	R640	VRD-RM2HD682J	J	6.8k 1/2W Carbon	AA
R444	VRD-RA2BE681J	J	680 1/8W Carbon	AA	R641	VRD-RA2BE273J	J	27k 1/8W Carbon	AA
R447	VRD-RA2BE681J	J	680 1/8W Carbon	AA	R642	VRD-RM2HD222J	J	2.2k 1/2W Carbon	AA
R504	VRD-MN2BE221J	J	220 1/8W Carbon	AA	R648	VRD-RM2HD1R5J	J	1.5 1/2W Carbon	AA
R505	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	△ R649	VRD-MN2BE472J	J	4.7k 1/8W Carbon	AA
R506	VRD-MN2BE392J	J	3.9k 1/8W Carbon	AA	R650	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R508	VRD-MN2BE123J	J	12k 1/8W Carbon	AA	R651	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R509	<i>See Controls</i>				R653	VRD-MN2BE101J	J	100 1/8W Carbon	AA
R510	VRD-RM2HD1R8J	J	1.8 1/2W Carbon	AA	R654	VRD-MN2BE153J	J	15k 1/8W Carbon	AA
R511	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA	R659	VRD-RA2BE391J	J	390 1/8W Carbon	AA
R512	VRD-MN2BE472J	J	4.7k 1/8W Carbon	AA	R671	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R513	VRD-RA2BE152J	J	1.5k 1/8W Carbon	AA	R672	VRD-RA2EE820J	J	82 1/4W Carbon	AA
△ R515	RR-XZ0035TAZZ	J	22 1/4W Fuse Resistor	AB	R674	VRS-VV3AB562J	J	5.6k 1W Metal Oxide	AA
R516	VRD-RM2HD331J	J	330 1/2W Carbon	AA	R682	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R519	VRD-MN2BE561J	J	560 1/8W Carbon	AA	R683	VRD-RA2BE122J	J	1.2k 1/8W Carbon	AA
R520	VRD-RA2EE275J	J	2.7M1/4W Carbon	AA	△ R701	VRW-KQ4AC2R7K	J	2.7 10W Cement	AE
△ R521	RR-XZ0029CEZZ	J	3.3 1/2W Fuse Resistor	AB	△ R702	VRW-KV3HC1R8K	J	1.8 5W Cement	AC
R522	VRD-MN2BE102J	J	1k 1/8W Carbon	AA	△ R703	RR-WZ0151CEZZ	J	12k 7W Cement	AD
R525	VRD-MN2BE681J	J	680 1/8W Carbon	AA	△ R704	VRS-VV3DB150J	J	15 2W Metal Oxide	AA
R526	VRD-RA2EE123J	J	12k 1/4W Carbon	AA	△ R705	VRD-RM2HD2R2J	J	2.2 1/2W Carbon	AA
R527	VRD-RA2EE155J	J	1.5M 1/4W Carbon	AA	△ R706	VRD-RA2BE394J	J	390k 1/8W Carbon	AA
R552	VRD-RA2EE122J	J	1.2k 1/4W Carbon	AA	△ R707	VRD-RA2BE390J	J	39 1/8W Carbon	AA
R553	VRD-MN2BE184J	J	180k 1/8W Carbon	AA	△ R708	VRS-SV3LB124J	J	120k3W Metal Oxide	AC
R554	VRD-RA2BE471J	J	470 1/8W Carbon	AA	△ R710	VRD-RA2BE392G	J	3.9k 1/8W Carbon	AA
R555	VRD-MN2BE562J	J	5.6k 1/8W Carbon	AA	△ R711	<i>See Controls</i>			
R556	VRD-MN2BE223J	J	22k 1/8W Carbon	AA	△ R712	VRD-RA2BE821J	J	820 1/8W Carbon	AA
R557	VRD-RA2BE224J	J	220k 1/8W Carbon	AA	△ R713	VRD-RA2EE225J	J	2.2M1/4W Carbon	AA
R558	VRD-RA2BE273J	J	27k 1/8W Carbon	AA	△ R714	VRD-RA2BE184J	J	180k 1/8W Carbon	AA
R608	VRD-RM2HD392J	J	3.9k 1/2W Carbon	AA	△ R715	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R609	VRS-SV3LB472J	J	4.7k 3W Metal Oxide	AC	△ R716	VRD-RA2EE180J	J	18 1/4W Carbon	AA
▲ R611	VRW-KV3NC100K	J	10 7W Cement	AC	△ R717	VRD-RA2BE101J	J	100 1/8W Carbon	AA
△ R612	RR-XZ0073CEZZ	J	270 1/2W Fuse Resistor	AB	△ R718	VRN-VV3ABR22J	J	0.22 1W Metal Film	AA
					△ R719	VRC-UA2HG825K	J	8.2M1/2W Solid	AA
					△ R720	VRC-UA2HG825K	J	8.2M1/2W Solid	AA

▲ MARK : X-RAY RELATED PARTS.

Ref. No.	Part No.	*	Description	Code
PWB-A DUNTK7911WEVO				
MOTHER UNIT (Continued)				
RESISTORS (Continued)				
△ R721	VRD-RM2HD1R0J J	1	1/2W Carbon	AA
△ R723	VRS-SV3LB272J J	2.7k	3W Metal Oxide	AD
△ R724	VRD-RA2BE102J J	1k	1/8W Carbon	AA
△ R731	RR-XZ0016CEZZ J	1	1/2W Fuse Resistor	AB
△ R735	VRD-RM2HD184J J	180k	1/2W Carbon	AA
△ R736	VRD-RM2HD184J J	180k	1/2W Carbon	AA
R807	VRD-MN2BE103J J	10k	1/8W Carbon	AA
R809	VRD-RA2BE271J J	270	1/8W Carbon	AA
R811	VRD-MN2BE271J J	270	1/8W Carbon	AA
R812	VRD-MN2BE271J J	270	1/8W Carbon	AA
R816	VRD-MN2BE102J J	1k	1/8W Carbon	AA
R817	VRD-MN2BE471J J	470	1/8W Carbon	AA
R818	VRD-MN2BE471J J	470	1/8W Carbon	AA
R825	VRD-MN2BE333J J	33k	1/8W Carbon	AA
R828	VRD-RA2BE683J J	68k	1/8W Carbon	AA
R829	VRD-MN2BE104J J	100k	1/8W Carbon	AA
R832	VRD-MN2BE271J J	270	1/8W Carbon	AA
R833	VRD-MN2BE223J J	22k	1/8W Carbon	AA
R837	VRD-MN2BE102J J	1k	1/8W Carbon	AA
R838	VRD-MN2BE102J J	1k	1/8W Carbon	AA
R839	VRD-MN2BE102J J	1k	1/8W Carbon	AA
R840	VRD-MN2BE561J J	560	1/8W Carbon	AA
R841	VRD-MN2BE561J J	560	1/8W Carbon	AA
R842	VRD-MN2BE561J J	560	1/8W Carbon	AA
R843	VRD-MN2BE103J J	10k	1/8W Carbon	AA
R844	VRD-RA2EE681J J	680	1/4W Carbon	AA
R849	VRD-MN2BE183J J	18k	1/8W Carbon	AA
R891	VRD-RA2BE122J J	1.2k	1/8W Carbon	AA
R902	VRD-RA2BE101J J	100	1/8W Carbon	AA
R909	VRD-MN2BE562J J	5.6k	1/8W Carbon	AA
R1005	VRD-MN2BE392J J	3.9k	1/8W Carbon	AA
R1006	VRD-MN2BE123J J	12k	1/8W Carbon	AA
R1007	VRD-MN2BE822J J	8.2k	1/8W Carbon	AA
R1008	VRD-MN2BE101J J	100	1/8W Carbon	AA
R1009	VRD-MN2BE472J J	4.7k	1/8W Carbon	AA
R1010	VRD-MN2BE472J J	4.7k	1/8W Carbon	AA
R1011	VRD-MN2BE472J J	4.7k	1/8W Carbon	AA
R1012	VRD-MN2BE223J J	22k	1/8W Carbon	AA
R1014	VRD-MN2BE392J J	3.9k	1/8W Carbon	AA
R1015	VRD-RA2BE103J J	10k	1/8W Carbon	AA
R1016	VRD-MN2BE392J J	3.9k	1/8W Carbon	AA
R1017	VRD-MN2BE223J J	22k	1/8W Carbon	AA
R1019	VRD-MN2BE101J J	100	1/8W Carbon	AA
R1020	VRD-MN2BE101J J	100	1/8W Carbon	AA
R1021	VRD-RA2BE101J J	100	1/8W Carbon	AA
R1022	VRD-RA2BE101J J	100	1/8W Carbon	AA
R1026	VRD-MN2BE333J J	33k	1/8W Carbon	AA
R1028	VRD-MN2BE684J J	680k	1/8W Carbon	AA
R1029	VRD-RA2BE333J J	33k	1/8W Carbon	AA
R1030	VRD-RA2BE333J J	33k	1/8W Carbon	AA
R1031	VRD-RA2BE153J J	15k	1/8W Carbon	AA

Ref. No.	Part No.	*	Description	Code
RESISTORS (Continued)				
R1032	VRS-VV3DB123J J	12k	2W Metal Oxide	AA
R1033	VRD-RA2BE682J J	6.8k	1/8W Carbon	AA
R1034	VRD-RA2BE271J J	270	1/8W Carbon	AA
R1035	VRD-RA2BE101J J	100	1/8W Carbon	AA
R1036	VRD-RA2BE102J J	1k	1/8W Carbon	AA
R1039	VRD-MN2BE153J J	15k	1/8W Carbon	AA
R1040	VRD-MN2BE123J J	12k	1/8W Carbon	AA
R1041	VRD-MN2BE103J J	10k	1/8W Carbon	AA
R1042	VRD-MN2BE333J J	33k	1/8W Carbon	AA
R1044	VRD-MN2BE103J J	10k	1/8W Carbon	AA
R1045	VRD-MN2BE101J J	100	1/8W Carbon	AA
R1046	VRD-MN2BE123J J	12k	1/8W Carbon	AA
R1048	VRD-MN2BE102J J	1k	1/8W Carbon	AA
R1049	VRD-MN2BE682J J	6.8k	1/8W Carbon	AA
R1050	VRD-RA2BE102J J	1k	1/8W Carbon	AA
R1051	VRD-MN2BE182J J	1.8k	1/8W Carbon	AA
R1052	VRD-MN2BE332J J	3.3k	1/8W Carbon	AA
R1053	VRD-MN2BE332J J	3.3k	1/8W Carbon	AA
R1054	VRD-MN2BE153J J	15k	1/8W Carbon	AA
R1055	VRD-MN2BE683J J	68k	1/8W Carbon	AA
R1056	VRD-MN2BE153J J	15k	1/8W Carbon	AA
R1057	VRD-RA2BE472J J	4.7k	1/8W Carbon	AA
R1060	VRD-RA2EE331J J	330	1/4W Carbon	AA
R1061	VRD-RA2EE181J J	180	1/4W Carbon	AA
R1062	VRD-RA2EE681J J	680	1/4W Carbon	AA
R1064	VRD-MN2BE123J J	12k	1/8W Carbon	AA
R1065	VRD-RA2BE683J J	68k	1/8W Carbon	AA
R1066	VRD-RA2BE682J J	6.8k	1/8W Carbon	AA
R1067	VRD-RA2EE821J J	820	1/4W Carbon	AA
R1068	VRD-RA2EE270J J	27	1/4W Carbon	AA
R1069	VRD-RA2EE331J J	330	1/4W Carbon	AA
R1072	VRD-MN2BE223J J	22k	1/8W Carbon	AA
R1073	VRD-RA2BE102J J	1k	1/8W Carbon	AA
R1074	VRD-RA2BE472J J	4.7k	1/8W Carbon	AA
R1078	VRD-RA2BE101J J	100	1/8W Carbon	AA
R1079	VRD-RA2BE101J J	100	1/8W Carbon	AA
R1080	VRD-MN2BE103J J	10k	1/8W Carbon	AA
R1081	VRD-MN2BE103J J	10k	1/8W Carbon	AA

SWITCHES

△ S701	QSW-P0418CEZZ J	Power	AK
△ S1001	QSW-K0068CEZZ J	Channel (+)	AB
△ S1002	QSW-K0068CEZZ J	Channel (-)	AB
△ S1003	QSW-K0068CEZZ J	Volume (+)	AB
△ S1004	QSW-K0068CEZZ J	Volume (-)	AB
△ S1005	QSW-K0068CEZZ J	P-Mode	AB
△ S1006	QSW-K0068CEZZ J	Pre-Set	AB
△ S1007	QSW-K0068CEZZ J	Skip	AB

Ref. No.	Part No.	*	Description	Code
PWB-A DUNTK7911WEV0				
MOTHER UNIT (Continued)				

MISCELLANEOUS PARTS

FB602	RBLN-0010CEZZ	J	Ferrite Bead	AC
FB603	RBLN-0018CEZZ	J	Ferrite Bead	AB
△ FB702	RBLN-0037CEZZ	J	Ferrite Bead	AB
△ FH701	QFSHD1009CEZZ	J	Fuse Holder	AA
△ FH702	QFSHD1010CEZZ	J	Fuse Holder	AA
△ F701	QFS-C3224CEZZ	J	Fuse, T3.15A	AD
△ J451	QJAKH0007CEZZ	J	Jack, AV In/Out	AL
P301	QPLGN0241CEZZ	J	Plug 2-pin, (S)	AA
P401	QPLGN0641CEZZ	J	Plug 6-pin, (YI)	AB
P402	QPLGN0441CEZZ	J	Plug 4-pin, (VA)	AB
P502	QPLGN0505CEZZ	J	Plug 5-pin, (F)	AB
P602	QPLGN0441CEZZ	J	Plug 4-pin, (H)	AB
△ P711	QPLGN0207CEZZ	J	Plug 2-pin, (G)	AA
△ P712	QPLGN0304CEZZ	J	Plug 3-pin, (A)	AB
P801	QPLGN0541CEZZ	J	Plug 5-pin, (K)	AB
RMC1001	RRMCU0195CEZZ	J	Remote Control Receiver	AK
LHLDP1017PE00	R		LED Holder	AB

Ref. No.	Part No.	*	Description	Code
PWB-B DUNTK6851WEZ3				
CRT SOCKET UNIT				

TRANSISTORS

Q851	VS2SC2229O/1E	J	2SC2229(O)	AD
Q852	VS2SC2229O/1E	J	2SC2229(O)	AD
Q853	VS2SC2229O/1E	J	2SC2229(O)	AD
Q854	VS2SA1015Y/1E	J	2SA1015(Y)	AC

DIODE

D851	VHD1SS119//1E	J	1SS119	AA
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COIL

L851	VP-CF681K0000	J	680μH	AB
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CONTROLS

R853	RVR-B4568CEZZ	J	10k(B) Red Bias	AC
R857	RVR-B4564CEZZ	J	1k(B) Green Drive	AC
R859	RVR-B4568CEZZ	J	10k(B) Green Bias	AC
R863	RVR-B4564CEZZ	J	1k(B) Blue Drive	AC
R865	RVR-B4568CEZZ	J	10k(B) Blue Bias	AC

CAPACITORS

C851	VCKYPA1HB391K	J	390p 50V Ceramic	AA
C852	VCKYPA1HB331K	J	330p 50V Ceramic	AA
C853	VCKYPA1HB391K	J	390p 50V Ceramic	AA
C854	RC-KZ015JCEZZ	J	0.01 3kV Ceramic	AB
C855	VCEAGA2DW106M	J	10 200V Electrolytic	AC
C860	VCKYD41CY103N	J	0.01 16V Ceramic	AA
C861	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C866	VCKYPA2HB121K	J	120p 500V Ceramic	AA
C870	VCEAGA1CW476M	J	47 16V Electrolytic	AB

RESISTORS

R851	VRD-RA2BE122J	J	1.2k 1/8W Carbon	AA
R852	VRD-RA2BE272J	J	2.7k 1/8W Carbon	AA
R853	See Controls			
R855	VRD-RM2HD272J	J	2.7k 1/2W Carbon	AA
R856	VRD-RA2BE681J	J	680 1/8W Carbon	AA
R857	See Controls			
R858	VRD-RA2BE272J	J	2.7k 1/8W Carbon	AA
R859	See Controls			
R860	VRS-VV3AB123J	J	12k 1W Metal Oxide	AA
R861	VRD-RM2HD272J	J	2.7k 1/2W Carbon	AA
R862	VRD-RA2BE561J	J	560 1/8W Carbon	AA

— End of PWB-A —

Ref. No.	Part No.	★	Description	Code
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PWB-B DUNTK6851WEZ3 CRT SOCKET UNIT (Continued)

RESISTORS (Continued)

R863	See Controls			
R864	VRD-RA2BE272J J	2.7k 1/8W Carbon	AA	
R865	See Controls			
R866	VRS-VV3AB123J J	12k 1W Metal Oxide	AA	
R867	VRD-RM2HD272J J	2.7k 1/2W Carbon	AA	
R868	VRS-VV3AB123J J	12k 1W Metal Oxide	AA	
R872	VRD-RA2BE681J J	680 1/8W Carbon	AA	
R873	VRD-RA2BE681J J	680 1/8W Carbon	AA	
R874	VRD-RA2BE681J J	680 1/8W Carbon	AA	
R878	VRD-RA2BE821J J	820 1/8W Carbon	AA	
R879	VRD-RA2BE822J J	8.2k 1/8W Carbon	AA	
R880	VRD-RA2BE101J J	100 1/8W Carbon	AA	
R881	VRD-RA2BE122J J	1.2k 1/8W Carbon	AA	

MISCELLANEOUS PARTS

P851	QPLGN0361CEZZ J	Plug 3-pin, (H)	AB	
P852	QPLGN0561CEZZ J	Plug 5-pin, (K)	AB	
△ SC851	QSOCV0829CEZZ J	CRT Socket	AK	

— End of PWB-B —

PWB-C — Not Used —

Ref. No.	Part No.	★	Description	Code
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PWB-D DUNTK7494WEV2 SIF CONVERTER UNIT

INTEGRATED CIRCUIT

IC2301	RH-IX0776CEZZ J	5.5MHz Converter	AN	
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TRANSISTORS

Q2301	VS2SA1015Y/1E J	2SA1015(Y)	AC	
Q2302	VS2SC945AP/-1 J	2SC945A(P)	AB	

DIODES

D2303	VHD1SS119//1E J	1SS119	AA	
D2304	VHD1SS119//1E J	1SS119	AA	
D2305	VHD1SS119//1E J	1SS119	AA	

COILS

CF2301	RFiLA0023CEZZ J	Ceramic Filter, 10 MHz	AF	
CF2302	RFiLA0024CEZZ J	Ceramic Filter, 11.5 MHz	AF	
CF2303	RFiLA0025CEZZ J	Ceramic Filter, 12 MHz	AF	
CF2304	RFiLC0144CEZZ J	Ceramic Filter, 6.0 MHz	AD	
CF2305	RFiLC0145CEZZ J	Ceramic Filter, 6.0 MHz	AE	
CF2306	RFiLC0001AJZZ J	Ceramic Filter, 4.5 MHz	AD	
CF2307	RFiLC0001AJZZ J	Ceramic Filter, 4.5 MHz	AD	
L2301	VP-DF180K0000 J	Coil, 18μH	AB	
L2303	VP-DF8R2K0000 J	Coil, 8.2μH	AB	
L2304	VP-DF6R8K0000 J	Coil, 6.8μH	AB	

CAPACITORS

C2301	VCCCPA1HH470J J	47p 50V Ceramic	AA	
C2302	VCCCPA1HH101J J	100p 50V Ceramic	AA	
C2303	VCCCPA1HH101J J	100p 50V Ceramic	AA	
C2304	VCFYHA1HA683J J	0.068 50V M. Polyester	AB	
C2305	VCCCPA1HH330J J	33p 50V Ceramic	AA	
C2306	VCQYSH1HM102K J	1000p50V Mylar	AA	
C2307	VCQYSH1HM103K J	0.01 50V Mylar	AA	
C2308	VCQYSH1HM103K J	0.01 50V Mylar	AA	
C2309	VCQYSH1HM102K J	1000p50V Mylar	AA	
C2310	VCEAGA1HW104M J	0.1 50V Electrolytic	AA	
C2311	VCFYHA1HA823J J	0.082 50V M. Polyester	AA	
C2313	VCEAGA1HW104M J	0.1 50V Electrolytic	AA	
C2314	VCEAGA1HW104M J	0.1 50V Electrolytic	AA	
C2315	VCCCPA1HH101J J	100p 50V Ceramic	AA	
C2316	VCCCPA1HH101J J	100p 50V Ceramic	AA	
C2317	VCCCPA1HH470J J	47p 50V Ceramic	AA	
C2318	VCEAGA1CW107M J	100 16V Electrolytic	AB	
C2319	VCKYD41CY103N J	0.01 16V Ceramic	AA	
C2320	VCKYD41CY103N J	0.01 16V Ceramic	AA	

Ref. No.	Part No.	★	Description	Code
PWB-D DUNTK7494WEV2				
SIF CONVERTER UNIT (Continued)				

RESISTORS

R2301	VRD-RA2BE102J	J	1k	1/8W Carbon	AA
R2302	VRD-RA2BE102J	J	1k	1/8W Carbon	AA
R2303	VRD-RA2BE101J	J	100	1/8W Carbon	AA
R2304	VRD-RA2BE331J	J	330	1/8W Carbon	AA
R2305	VRD-RA2BE333J	J	33k	1/8W Carbon	AA
R2306	VRD-RA2BE332J	J	3.3k	1/8W Carbon	AA
R2307	VRD-RA2BE122J	J	1.2k	1/8W Carbon	AA
R2309	VRD-RA2BE221J	J	220	1/8W Carbon	AA
R2310	VRD-RA2BE221J	J	220	1/8W Carbon	AA
R2311	VRD-RA2EE105J	J	1M	1/4W Carbon	AA
R2312	VRD-RA2BE332J	J	3.3k	1/8W Carbon	AA
R2313	VRD-RA2BE103J	J	10k	1/8W Carbon	AA
R2314	VRD-RA2BE103J	J	10k	1/8W Carbon	AA
R2315	VRD-RA2EE105J	J	1M	1/4W Carbon	AA
R2316	VRD-RA2EE105J	J	1M	1/4W Carbon	AA
R2317	VRD-RA2BE331J	J	330	1/8W Carbon	AA
R2318	VRD-RA2BE332J	J	3.3k	1/8W Carbon	AA
R2319	VRD-RA2BE331J	J	330	1/8W Carbon	AA
R2320	VRD-RA2EE105J	J	1M	1/4W Carbon	AA
R2321	VRD-RA2EE105J	J	1M	1/4W Carbon	AA
R2322	VRD-RA2BE221J	J	220	1/8W Carbon	AA

MISCELLANEOUS PART

P2301	QPLGZ0707GEZZ	J	Plug 7-pin, (MC)	AB
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— End of PWB-D —

Ref. No.	Part No.	★	Description	Code
PWB-E DUNTK7926WEV0				
AV UNIT				

INTEGRATED CIRCUITS

IC351	VHITA7348P/-1	J	Audio Output	AK
IC451	VHITA7348P/-1	J	Video Output	AK

TRANSISTORS

Q351	VS2SC945AP/-1	J	2SC945A(P)	AB
Q352	VS2SC945AP/-1	J	2SC945A(P)	AB
Q353	VS2SC945AP/-1	J	2SC945A(P)	AB
Q354	VS2SC945AP/-1	J	2SC945A(P)	AB
Q355	VS2SC945AP/-1	J	2SC945A(P)	AB
Q452	VS2SC945AP/-1	J	2SC945A(P)	AB
Q453	VS2SC945AP/-1	J	2SC945A(P)	AB
Q454	VS2SC945AP/-1	J	2SC945A(P)	AB
Q455	VS2SC945AP/-1	J	2SC945A(P)	AB

DIODES

D353	RH-EX0150GEZZ	J	Zener Diode, 8.2V	AA
D354	RH-EX0150GEZZ	J	Zener Diode, 8.2V	AA
D355	VHD1SS119//1E	J	1SS119	AA
D356	VHD1SS119//1E	J	1SS119	AA
D451	RH-EX0041TAZZ	J	Zener Diode, 9.1V	AC
D452	RH-EX0041TAZZ	J	Zener Diode, 9.1V	AC

COILS

CF452	RFILC0024CEZZ	J	Ceramic Filter, 6.5MHz	AE
CF453	RFILC0002AJZZ	J	Ceramic Filter, 4.5MHz	AD
CF454	RFILC0150CEZZ	J	Ceramic Filter, 5.5/6.5MHz	AF
L452	VP-XF150K0000	J	Coil, 150μH	AB
L453	VP-XF150K0000	J	Coil, 150μH	AB
L454	VP-XF150K0000	J	Coil, 150μH	AB
L455	VP-XF6R8K0000	J	Coil, 6.8μH	AB

CAPACITORS

C351	VCEAGA1CW106M	J	10	16V Electrolytic	AA
C352	VCE9GA1CW106M	J	10	16V Elect. (N.P)	AB
C353	VCKYPA1HF103Z	J	0.01	50V Ceramic	AA
C354	VCEAGA1CW337M	J	330	16V Electrolytic	AC
C355	VCEAGA1CW106M	J	10	16V Electrolytic	AA
C356	VCE9GA1CW106M	J	10	16V Elect. (N.P)	AB
C357	VCKYPA1HF103Z	J	0.01	50V Ceramic	AA
C358	VCEAGA1CW476M	J	47	16V Electrolytic	AB
C359	VCKYPA1HF103Z	J	0.01	50V Ceramic	AA
C360	VCE9GA1CW106M	J	10	16V Elect. (N.P)	AB
C361	VCKYPA1HF103Z	J	0.01	50V Ceramic	AA

Ref. No.	Part No.	*	Description	Code
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PWB-E DUNTK7926WEVO AV UNIT (Continued)

CAPACITORS (Continued)

C362	VCEAGA1CW476M	J	47	16V Electrolytic	AB
C363	VCEAGA1EW475M	J	4.7	25V Electrolytic	AA
C451	VCCSPA1HL331J	J	330p	50V Ceramic	AA
C452	VCCCPA1HH820J	J	82p	50V Ceramic	AA
C453	VCEAGA1CW107M	J	100	16V Electrolytic	AB
C454	VCKYPA1HF103Z	J	0.01	50V Ceramic	AA
C455	VCEAGA1CW106M	J	10	16V Electrolytic	AA
C456	VCE9GA1CW106M	J	10	16V Elect. (N.P)	AB
C457	VCE9GA1CW106M	J	10	16V Elect. (N.P)	AB
C459	VCKYPA1HF103Z	J	0.01	50V Ceramic	AA
C460	VCKYPA1HF103Z	J	0.01	50V Ceramic	AA
C461	VCEAGA1CW107M	J	100	16V Electrolytic	AB
C463	VCEAGA0JW477M	J	470	6.3V Electrolytic	AB
C466	VCEAGA1CW106M	J	10	16V Electrolytic	AB

RESISTORS

R351	VRD-RA2BE124J	J	120k	1/8W Carbon	AA
R352	VRD-RM2HD100J	J	10	1/2W Carbon	AA
R353	VRD-RA2BE474J	J	470k	1/8W Carbon	AA
R354	VRD-RA2BE124J	J	120k	1/8W Carbon	AA
R355	VRD-RA2BE332J	J	3.3k	1/8W Carbon	AA
R356	VRD-RA2BE102J	J	1k	1/8W Carbon	AA
R358	VRD-RA2BE101J	J	100	1/8W Carbon	AA
R359	VRD-RA2BE101J	J	100	1/8W Carbon	AA
R361	VRD-RA2BE101J	J	100	1/8W Carbon	AA
R362	VRD-RA2BE104J	J	100k	1/8W Carbon	AA
R363	VRD-RA2BE474J	J	470k	1/8W Carbon	AA
R364	VRD-RA2BE332J	J	3.3k	1/8W Carbon	AA
R365	VRD-RA2BE102J	J	1k	1/8W Carbon	AA
R366	VRD-RA2BE472J	J	4.7k	1/8W Carbon	AA
R367	VRD-RA2BE103J	J	10k	1/8W Carbon	AA
R368	VRD-RA2BE103J	J	10k	1/8W Carbon	AA
R369	VRD-RA2BE123J	J	12k	1/8W Carbon	AA
R371	VRD-RA2BE152J	J	1.5k	1/8W Carbon	AA
R451	VRD-RA2BE271J	J	270	1/8W Carbon	AA
R453	VRD-RA2BE391J	J	390	1/8W Carbon	AA
R454	VRD-RA2BE391J	J	390	1/8W Carbon	AA
R455	VRD-RA2BE271J	J	270	1/8W Carbon	AA
R456	VRD-RA2BE222J	J	2.2k	1/8W Carbon	AA
R457	VRD-RA2BE681J	J	680	1/8W Carbon	AA
R458	VRD-RA2BE272J	J	2.7k	1/8W Carbon	AA
R459	VRD-RA2BE182J	J	1.8k	1/8W Carbon	AA
R460	VRD-RA2BE101J	J	100	1/8W Carbon	AA
R463	VRD-RA2BE271J	J	270	1/8W Carbon	AA
R465	VRD-RA2BE330J	J	33	1/8W Carbon	AA
R466	VRD-RA2EE471J	J	470	1/4W Carbon	AA
R467	VRD-RA2BE100J	J	10	1/8W Carbon	AA
R468	VRD-RM2HD221J	J	220	1/2W Carbon	AA
R469	VRD-RA2EE680J	J	68	1/4W Carbon	AA

Ref. No.	Part No.	*	Description	Code
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RESISTORS (Continued)

R470	VRD-RA2BE103J	J	10k	1/8W Carbon	AA
R471	VRD-RA2BE101J	J	100	1/8W Carbon	AA
R472	VRD-RA2BE101J	J	100	1/8W Carbon	AA
R479	VRD-RM2HD100J	J	10	1/2W Carbon	AA
R480	VRD-RM2HD100J	J	10	1/2W Carbon	AA
R482	VRD-RA2BE680J	J	68	1/8W Carbon	AA

MISCELLANEOUS PARTS

P352	QPLGZ0507GEZZ	J	Plug 5-pin, (MB)	AB
P353	QPLGZ0407GEZZ	J	Plug 4-pin, (MA)	AB
P451	QPLGZ0641CEZZ	J	Plug 6-pin, (YI)	AB
P452	QPLGZ0441CEZZ	J	Plug 4-pin, (VA)	AB

— End of PWB-E —

MISCELLANEOUS PARTS

CN301	QCNW-1240PEZZ	R	Connecting Cord	AE
CN401	QCNW-1455PEZZ	R	Connecting Cord	AL
CN402	QCNW-1456PEZZ	R	Connecting Cord	AH
CN851	QCNW-1341PEZZ	R	Connecting Cord	AF
CN852	QCNW-1342PEZZ	R	Connecting Cord	AF
SP1	VSP0080P-G5YB	R	Speaker, 8 cm, 32Ω	AN
	LHLDK0001PEZZ	R	AC Cord Holder	AC
	QACCZ3003PEZZ	R	AC Cord	AQ

— End of MISCELLANEOUS PARTS —

Ref. No.	Part No.	★	Description	Code
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PACKING PARTS (NOT REPLACEMENT ITEM)

SPAKC5779PEZZ	-	Packing Case	—
		(Only for 14BN1)	
SPAKC5780PEZZ	-	Packing Case	—
		(Only for 14BN14)	
SPAKC5787PEZZ	-	Packing Case	—
		(Only for 14BN1A)	
SPAKF0026PEZZ	-	Packing Pad	—
SPAKP0056PEZZ	-	Polystyrene Mat	—
SPAKX0309PEZZ	-	Buffer Material	—
TLABK0001PEZZ	-	Number Card	—

— End of PACKING PARTS —

Ref. No.	Part No.	★	Description	Code
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SUPPLIED ACCESSORIES

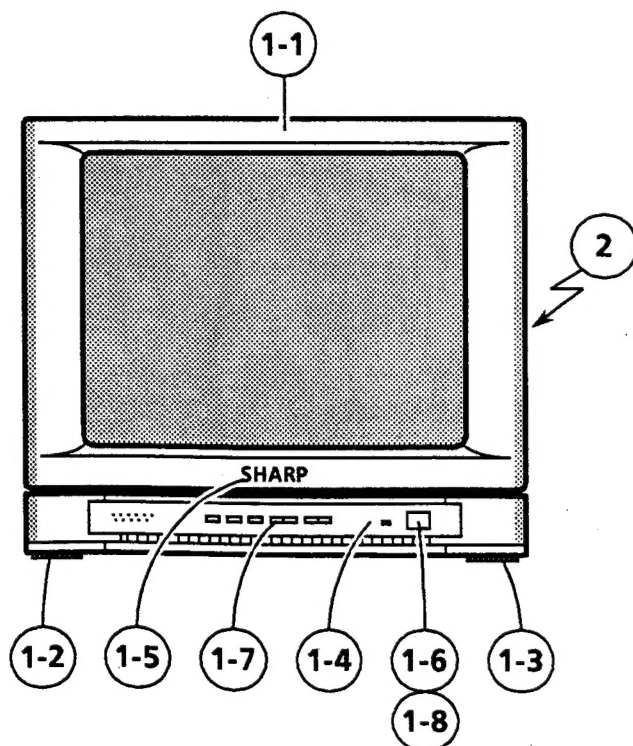
ACCESSORIES

QANTR0014PEZZ	R	Rod Antenna	AV
QPLGA0011CEZZ	J	AC Plug Adapter	AF
QTANJ0005PEZZ	J	Antenna Plug, 300 – 75Ω AM	
RRMCG0833PESA	R	Infrared R/C Unit	AX

ACCESSORIES (NOT REPLACEMENT ITEM)

TINS-5101PEZZ	-	Operation Manual	—
		(Only for 14BN1, 14BN1A)	
TINS-5100PEZZ	-	Operation Manual	—
		(Only for 14BN14)	
TMAPC3877PEZZ	-	Service Map	—
UBATU1032CCN1	-	Dry Batteries, Size AAA (2 pcs)	—

— End of SUPPLIED ACCESSORIES —



CABINET PARTS

1	CCABA2136WEW6	R	Cabinet Ass'y, Front (Only for 14BN1)	BC
1	CCABA2136WEW8	R	Cabinet Ass'y, Front (Only for 14BN14)	BE
1	CCABA2136WEX0	R	Cabinet Ass'y, Front (Only for 14BN1A)	BE
1-1	Not available	-	Cabinet, Front	—
1-2	GLEGP9007PESA	R	Leg (Left)	AF
1-3	GLEGP9008PESA	R	Leg (Right)	AF
1-4	GMADT0093PESA	R	Window Cover (Only for 14BN1, 14BN14)	AM
1-4	GMADT0103PESA	R	Window Cover (Only for 14BN1A)	AM
1-5	HBDGB0010PESB	R	Badge, "SHARP"	AG
1-6	JBTN-0084PESA	R	Button, Power	AD
1-7	JBTN-0085PESA	R	Buttons, Ch./Vol.	AF
1-8	MSPRC0008PEFW	R	Spring, Power Button	AB
2	GCABB2140PEKA	R	Cabinet, Rear	AY

— End of CABINET PARTS —